Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

March 13, 1961

XYLENES GROWTH PACED BY ORTHO

OPD SPECIAL 'DEPTH' REPORT
PAGE THREE

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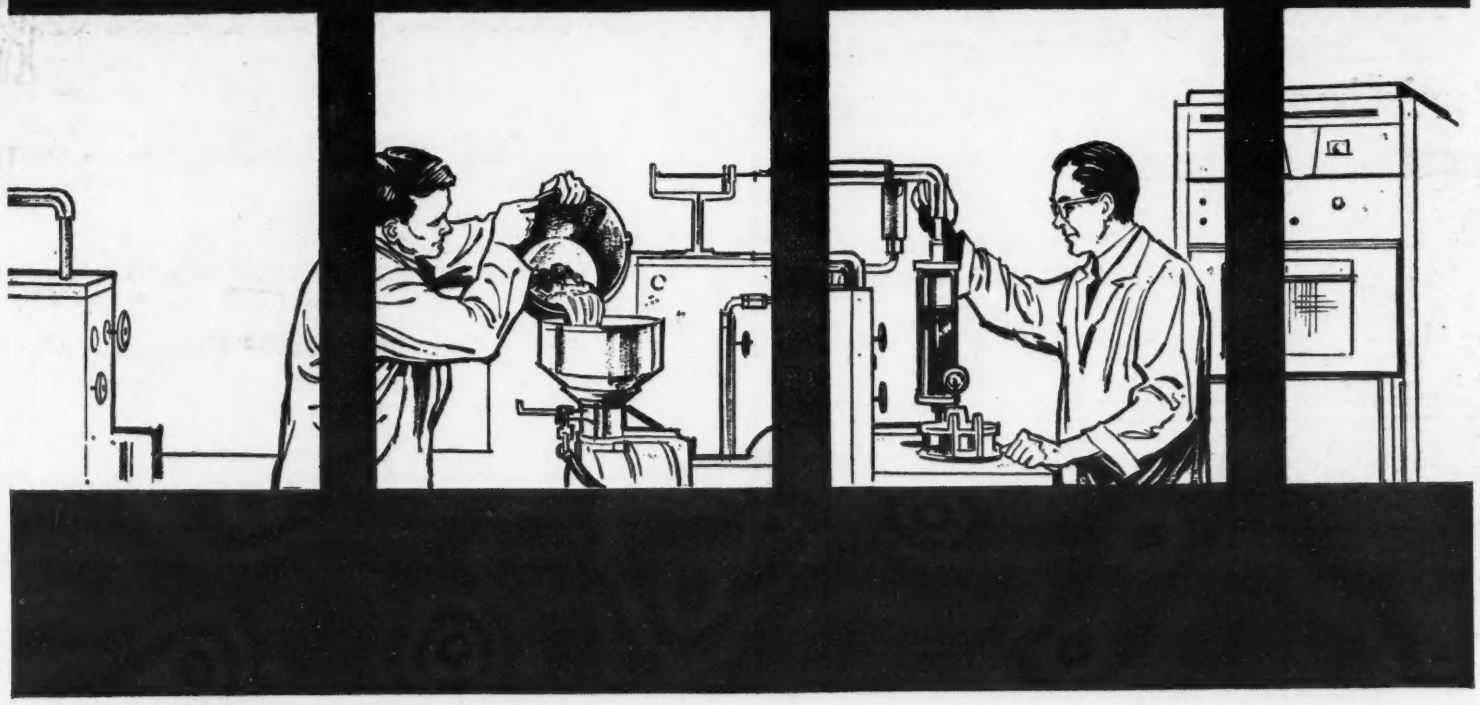

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XYLENE ISOMERS DEMAND
It's Ortho Pacing the Field

	Orthoxylene	Paraxylene	Metaxylene
	Millions of Pounds		
1963	?	230.0	50.0
1962	370.0	210.0	45.0
1961	180.0	190.0	40.0
1960	120.0	175.0	32.0
1959	*61.7	*157.9	15.0
1958	30.0	*106.3	7.0
1957	28.0	*86.3	6.0

*Tariff Commission. All other figures are estimates.

Xylenes Capacity Set for Jump Of 101 Million Gallons in 1961 Mainly Due to Isomer Demand

Xylenes capacity could jump to 456 million gallons annually by January 1, 1962, up 101 million gallons from the total at the beginning of 1961. Part of the build-up can be attributed to the hectic benzene race (with corresponding increases in xylene production). But at least 71 million gallons of new capacity is earmarked for isomer separation. By next January the following xylene isomer capacities should be in place: o-xylene, 627 million pounds a year; p-xylene, 310 million pounds; m-xylene, 50 million pounds; ethylbenzene ex xylenes, 187 million pounds. Isomer capacity at the start of 1961: o-xylene, 188 million pounds; p-xylene, 205 million pounds; m-xylene, 50 million pounds; ethylbenbene ex xylenes, 22 million pounds.

OPD 'Depth' Report

While ethylbenzene technically is not a xylene isomer, it is dealt with here because it occurs naturally in mixed xylene streams in concentrations up to 20 percent and even higher in petroleum fractions. It occurs in minute quantities in coaltar xylenes.

Ortho's Explosive Growth

Most explosive growth of any isomer of xylene is the boom in ortho. Fast capacity build-up has been spawned by a world-wide shortage of naphthalene, combined with a surge in global phthalic anhydride capacities.

For years Oronite Chemical Company was the only domestic producer of phthalic anhydride from o-xylene. American Cyanamid Company and Monsanto Chemical Company, among others, dabbled with it as a prospective phthalic anhydride raw material and didn't like the yields.

The West Germans also tried o-xylene in their phthalic anhydride plants but were dissatisfied with the results, preferring naphthalene. Other countries are also reported to have tried it and written it off.

Trade interest was jogged when Amoco Chemicals Corporation announced it would build a dibasic-acids-ex-xylenes

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Petro-Xylene Capacities

	1/1/61	1/1/62
	(Million Gals./yr.)	
Amoco	5.0	5.0
Ashland	6.0	12.0
Cities Service	...	17.0
Cosden	11.0	11.0
Crown Central	...	12.0
Delhi-Taylor	22.0	22.0
Great Southern	4.0	4.0
Humble	80.0	94.0
Leonard	0.5	0.5
Pure	17.0	17.0
Pure-Atlantic	...	12.0
Richfield	5.0	5.0
Shell	28.0	28.0
Signal	8.0	8.0
Sinclair	70.0	80.0
Standard Oil (Calif.)	38.0	53.0
Standard Oil (Ind.)	10.0	10.0
Sun	15.0	15.0
Suntide	18.0	18.0
Tennessee Oil	...	15.0
Vickers	6.0	6.0
Total	343.5	444.5

XYLENES OUTPUT

1963 . .*370.0 million gals.
1962 . .*361.0 million gals.
1961 . .*331.5 million gals.
1960 . . 322.0 million gals.
1959 . . 241.5 million gals.
1958 . . 200.5 million gals.
1957 . . 127.2 million gals.
1956 . . 136.3 million gals.

*Estimate

Source: Tariff Commission

Food Additives Extension Bill: A Speed-Up Is Now in the Works

The rules committee of the house is weighing a request to speed up the food additives extension bill, HR 3980, to hasten its passage through congress and transmission to the White House and the pen of the President. The request was made to the committee last week by Rep. Oren Harris, of Arkansas, chairman of the house commerce committee, shortly after his group reported the bill with two—but not wholly unexpected—modifications.

These would:

- Include within the scope of the extension authority any requests for extensions that may have been pending in Food & Drug Administration last Monday (March 6).
- Limit the time extensions that can be granted by FDA, when additives must be brought into compliance with the law, to June 30, 1964.

Rules Hearing This Week

It is anticipated that the rules committee will hold a hearing on the Harris request some time this week and give it favorable action. This would enable the bill to be taken up later in the week and speeded to the senate where it is planned to act promptly on the legislation, once it clears the house.

Failure of congress to act with greater speed to approve the extension bill before time ran out on March 6 for getting additives cleared under the law was a disappointment to industry and FDA, but there is no reason for chemical producers to be concerned that they may be technically violating the law in continuing to sell additives that have not been cleared.

Word went out to all of the field offices of FDA from the office of the commissioner as the March 6 deadline approched, advising them that Commissioner George P. Larrick will administratively weigh all present extensions as continuing in effect during the period that congress is actively considering HR 3980.

Also, the notice said that as soon as

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HEADS RESEARCH: Dr. William E. Thompson, appointed director of research for Archer-Daniels-Midland Company, Minneapolis, Minn.

Berkshire Bought Up As One-Man Property

Berkshire Chemicals, Inc., a wholly-owned subsidiary of Vitro Corporation of America since 1956, is now the property of just one man. It was purchased from Vitro last fortnight for $300,000 in cash and notes.

New owner is Malcolm H. McAllister, who helped found Berkshire in 1949, and has been president of it as a Vitro subsidiary.

As a resale organization, Berkshire "does not fit into our future plans in the chemical and metallurgical industries," a spokesman for Vitro says.

He adds that Vitro capital could be put to better use in such acquisitions as the recent addition and expansion of metal alloy and pure metal production

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Chemical Clearance Sale: Gov't Is Thinking of One

Billions of dollars of chemically-important materials now locked up in the national stockpile for emergency use may be made available for purchase by the chemical industry—if this can be done without disrupting domestic prices.

Sen. A. Willis Robertson of Virginia disclosed last week that the joint house-senate committee on defense production will shortly begin a study of the feasibility of cutting back the national stockpiles

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'Alfol' Plant Slated In European Market

"Alfol" industrial fatty alcohols are moving to Europe. Continental Oil Company and Deutsche Erdoel AG (DEA) announced Saturday (March 11) the formation of a fifty-fifty owned firm which will build a 50,000-ton-a-year plant near Hamburg, West Germany.

The new firm will be headquartered near Hamburg and will be known as CONDEA Petrochemie-Gesellschaft mbH. The "Alfol" plant will be built on a site near Kiel Canal.

The unit will be similar to Continental Oil's facility now under construction near Lake Charles, La., which will be the first to make from petroleum a line of industrial alcohols formerly produced from natural oils and fats. Completion date at Lake Charles will be late 1961.

"Alfol" alcohols from both the Hamburg and Lake Charles units will be used by the detergent, plasticizer, cosmetic, paper,

—Continued on page 73

IN DEVELOPMENT POST: Actor H. Patton, appointed director of product development for the General Chemical Division of Allied Chemical Corporation, New York.

FDA on FD&C Colors: Tests Are No Cause for Worry

Food & Drug Administration scientists are showing no concern over the safety of FD&C colors being tested for clearance under the new color additives law.

Drug industry representatives, after conferring with Dr. Arnold Lehman, chief of FDA's division of pharmacology, report that the agency indicates no disturbing results have been noticed so far in the test work on these colors.

So reports this week's *Newsletter* of Pharmaceutical Manufacturers Association.

The letter suggests that the final results might be the setting of tolerances still under long-term tests, with free use granted for others. A complication might arise if FDA should decide that certain food uses for some of the colors are more essential, it is added.

With respect to titanium dioxide, caromel, ferric oxide, carmine and certain other colors, the *Newsletter* has this to say:

"The FDA people said no pharmacological problems exist with respect to use of titanium dioxide as a color additive in drugs if of proper quality. Caromel already has been approved, and approval could probably be obtained for use of ferric oxides as color additives if they are satisfactorily free from heavy metal and other toxic impurities and if the iron intake would not be medically significant.

"Thus further studies are needed of ferric oxides, but animal testing will probably not be involved. FDA officials said that they had no information on the safety of carmine, which suggests extensive tseting will be required.

"FDA officials said satisfactory completion of pharmacological tests on cer-

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Soapers vs. Justice Department: Syndets Break Antitrust Bubble

The soap business just isn't what it used to be—and that is a good thing for three of the country's largest soap makers. Now, because of so many recent changes in their industry, the producers will not have to face civil antitrust charges brought by the government eight years ago. The suit was dropped last week at the behest of the Department of Justice on the grounds that the soap business is so different from what it had been that it would serve no purpose to continue the litigation.

Synthetic detergents have encroached so far on soap in recent years that the Justice department felt the case could not be resolved with a decree.

Charges Go Out of the Window

Federal Judge Richard Hartshorne signed the dismissal order in Newark, N.J., and out of the window went the charges against Colgate-Palmolive Company and Lever Brothers Company, both of New York, and Procter & Gamble Company, Cincinnati, Ohio. Similar charges against the Association of American Soap & Glycerine Producers were also dismissed.

Explaining its change of heart, the Justice department declared that while the suit had specifically mentioned both detergents and soaps, the pattern of production since 1952 has shifted so rapidly and so considerably from soaps to detergents that the emphasis in the original suit is now outdated.

The suit had accused the soap makers and the trade association of a conspiracy in restraint of trade and joint monopolization in the household soap and synthetic detergent industry.

The government had asked that the three companies be kept out of the trade association, and further wanted each of them split up into smaller firms.

Trial was delayed by all kinds of legal maneuvering and sparring, and never got beyond the pre-trial stage. The delay resulted partly from the death of a trial judge and long efforts by the government to insert data into the pre-trial record.

Another factor was a successful effort

—Continued on page 73

Plastic Shoe Factory To Be Built in Ghana

Ghana, one of Africa's emerging nations, is going into the shoe business, thanks to the low cost of plastic raw materials.

The country's government has just made arrangements to put a plant at Tema for manufacture of low-priced plastic shoes.

Annual production is expected to reach 800,000 pairs. The finished shoes, according to the Department of Commerce, will retail at no more than 80 cents a pair, with some styles priced still lower. Imported plastic sheeting and other components will be used, Commerce reports.

Fertilizer for India: With American Help

Two American chemical companies have been granted licenses to go to India and, along with an Indian concern, build a $51 million fertilizer plant there. Output of the facility is being scheduled at 350,000 tons of chemical fertilizer a year.

The American licensees are: International Minerals & Chemical Corporation, Skokie, Ill., and California Chemical Company, a subsidiary of Standard Oil Company of California, San Francisco. The Indian partner is the E. I. D. Parry group, of Madras.

Plans call for construction of the Indian plant in the port city of Visag, near a Caltex oil refinery that would supply some ingredients used in the manufacturing process. (Caltex is also an affiliate of Standard of California.)

The American companies announced that with the granting of the license, com-

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Finns Slate Chemical Plant

Finland is mapping plans for a major heavy chemicals installation. The plant, operated by the state sulfuric acid and superphosphate enterprise, would turn out 70,000 tons of sodium sulfate and 62,000 tons of calcium chloride annually. It would be supplied from the new Pyhasalmi mine with iron, copper and zinc. Sodium sulfate output is slated to move to the cellulose industry and calcium chloride to be used as a binding agent for dirt roads.

Pall Corp. Marks Entry Into the Glass Fiber Field

Pall Corporation, Glen Cove, N. Y., has made plans to enter into manufacture of glass fibers. The company, through Fibrous Glass Products, Inc., a wholly-owned subsidiary, will soon start construction of an integrated glass-making and fiber-drawing plant at Wilkes-Barre, Pa.

The plant, which will have a capacity of approximately 10 million pounds per year, will cost $1.8 million. It will produce a high quality glass fiber for use in the manufacture of thermal, acoustical and shock insulation, disposable filter cartridges and a wide variety of other products. A part of the output will be used by the company for its own lines; the rest will be available for general sale to other manufacturers.

The site for the facility has been selected and designs for the building and equipment are nearing completion. The new plant is expected to be in operation by January, 1962.

The Week's Price Changes

Benzyl Cinnamate, Corn Oil, Ethyl Cinnamate Advanced. Copra, Isoeugenol, Soybean Meal, Tung Oil Reduced.

Prices Advanced

Benzyl cinnamate, 50c. per lb. (p. 52).
Corn oil, crude, 3½c. per lb. (p. 67).
Refd., 3½c. per lb. (p. 67).
Ethyl cinnamate, 20c. per lb. (p. 52).
Fish oils, refd., 3/10c. per lb. (p. 67).
Linseed meal, old process, $1 per ton (p. 67).
Oiticica oil, ¼c. to ½c. per lb. (p. 67).
Peanut oil, crude, ¼c. per lb. (p. 67).
Refd., ¼c. per lb. (p. 67).
Sandalwood oil, $5 per lb. (p. 67).

Prices Reduced

Cocoa butter, 1½c. per lb. (p. 67).
Copra, $2.50 per ton (p. 67).
Cottonseed meal, $1 per ton (p. 67).
Isoeugenol, 30c. per lb. (p. 52).
Linseed meal, extract, $1 per ton (p. 67).
Peanut meal, $1 per ton (p. 67).
Saccharin, 10c. per lb. (p. 57).
Soybean meal, $2 per ton (p. 67).
Tallow, inedible, top grades, ½c. per lb. (p. 67).
Tung oil, ½c. per lb. (p. 67).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER's relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Mar. 10, 1961	Mar. 3, 1961	Mar. 11, 1960
111.85	111.80	110.40

Sodium: Easier Prospecting

The government is moving to speed the issuance of permits for prospecting for sodium lands, but the prospectors are going to pay for the new service. Secretary of the Interior Steward L. Udall last week announced that rules for sodium prospecting permits are to be changed in order to expedite issuance and at the same time to require a 25-cents-an-acre annual rental. No rental is charged for sodium prospecting permits at the present time.

The proposed rules would adopt a new application-permit form that would permit the department's Bureau of Land Management to process applications much faster. The form would embody both the application and the final permit in the same document. A similar form is now used to process federal non-competitive oil and gas leases.

On Same Basis as Potassium

Adoption of a 25-cents-an-acre rental fee will put sodium prospecting permits on the same basis as potassium prospecting permits. The 25-cent rental would apply to all new sodium prospecting permits issued after the date the new rules go into effect.

The rental would not apply to leases issued before that date. Had the rental been in effect last year, the revenues from these permits to the federal Treasury would have been about $250,000.

Bureau of Land Management Director

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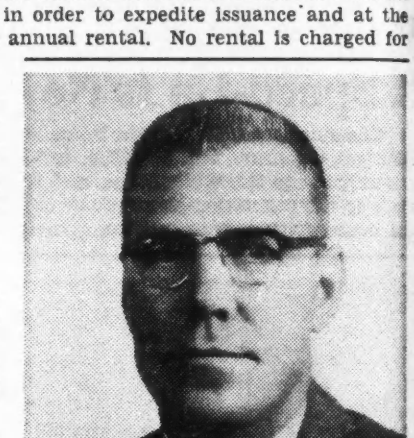

NEW MANAGER: Carl A. Bergman, appointed market manager-chemicals by General Dyestuff Company, a division of General Aniline & Film Corporation, New York.

PCA Awards $3.5 Million Plant Revamping Contract

Potash Company of America has awarded an engineering-construction contract to Stearns-Rogers Manufacturing Company, Denver, Colo., for modernizing the company's potash plant at Carlsbad, N.M. The $3.5 million project has been scheduled for completion in mid-1962.

The company's Carlsbad reserves, now estimated at ten years, are expected to be extended to at least a sixteen-year supply through the project, which will permit mining of ores too difficult to handle in the present plant.

Ores containing magnesium are currently bypassed, a spokesman explains, but these will become available for processing when the new plant is installed.

Grace Brings on Stream New Ammonia Facilities

Nitrogen Products Division of W. R. Grace & Co., New York, is on stream today (March 13) with 60,000 tons of new ammonia capacity at its Memphis, Tenn., plant.

The new capacity, completed just before the peak of the fertilizer use-season, brings the overall ammonia potential of the nitrogen plant to more than 160,000 tons annually.

The additional ammonia capacity will go to satisfy in-plant requirements of the

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JOINS FLORASYNTH: Harold L. Janovsky, former head of the flavor laboratories of Fritzsche Brothers, Inc., has joined Florasynth Laboratories, Inc., New York, as technical director.

Drew Sells His Stock In E. F. Drew & Co.

An old-time New York investment banker, Lehman Brothers, has bought up all the outstanding common stock of an old-time New York vegetable oil and chemical concern, E. F. Drew & Co.

The shares came directly from the company's founder, E. F. Drew, who has retired as a director and chief executive officer.

The price was not announced.

A spokesman for Lehman Brothers said the Drew business will continue its normal operations and no major changes in the business or in personnel are at present contemplated.

It was added that a special stockholders meeting will be held soon to elect a new board of directors.

The Drew organization, founded in 1906, is a major factor in the processing and sale of vegetable oils, and also has diversified chemical operations.

Its principal manufacturing facilities are in Boonton, N.J., and Lindsay, Calif. It also operates subsidiaries near Toronto, Canada, and Sao Paulo, Brazil. It has sales offices in principal American cities and in South America and Europe.

Grace to Build PA Facility; Caustic-Chlorine Started Up

W. R. Grace & Co. has slated a new plant near Bogota, Colombia, for production of phthalic anhydride and plasticizers, which are now imported. The unit will also increase production of naphthalene, creosote and pitch, products now manufactured at the company's Carboquimica plant.

Grace recently started up its new caustic soda-chlorine plant in Peru. This plant is connected with Grace's paper mill in Peru which is currently being expanded by the addition of a fifth paper machine, bringing annual capacity to 50,000 tons.

Kefauver in the Springtime: The Tennessean Readies Probe Of Prescription Counterfeiting

Spring is almost here and so is Sen. Kefauver. The antitrust prober from Tennessee, dormant since his pokings into the antibiotics field last September, plans to emerge about the time of the vernal equinox and start cultivating a brand-new investigation. This one will be his long-intended probe into the counterfeiting of prescription drugs. March 21 has been selected as the starting date and Food & Drug Administration is all set to present the principal testimony.

But, in announcing the hearing date, Sen. Kefauver gives no indication of how long the hearing will run, nor the number of persons who will be heard. He does reveal, however, that additional witnesses are scheduled to be heard later and that their names will be announced presently.

"Much has been written and said about counterfeit drugs in recent months," the senator explains. "The pirating of trademarks by irresponsible individuals is a vicious practice, whether the counterfeit is efficacious or worthless.

"The subcommittee wishes to determine the extent of this practice, who is engaging in it, and how to bring about its termination. To this end we will hear the views of the Food & Drug Administration, which has been investigating this practice, as well as other witnesses who can provide us with useful information."

Paul Rand Dixon, chief counsel for the committee and chief interrogator throughout the past drug hearings, will probably not be present to participate in this latest phase of the drug industry investigation. His nomination to be chairman of the

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Maybe in Canada, Too

Canada may soon be having a drug investigation similar to the Kefauver probe in the United States. In Ottawa, the Restrictive Trade Practices Commission has submitted a preliminary report on drug doings. Now, it's up to the commission to decide on whether a full-dress investigation is warranted.

Antitrust Complaint Says Drug Prices Rigged in West

Department of Justice has filed civil antitrust complaints against two western pharmaceutical associations, charging conspiracy to fix prices for prescription drugs.

In separate complaints, the Utah State Pharmaceutical Association and the Idaho State Pharmaceutical Association were accused last week of violating section 1 of the Sherman antitrust act.

One complaint asserts that since the fall of 1954, the Utah group, representing 80 percent of the pharmacies and pharmacists in that state, has established uniform prices for prescription drugs. The effect has been that price competition has been suppressed and the price of prescription drugs sold to consumers in Utah has increased, the department contends.

The United States District Court in Salt Lake City has been asked for an in-

—Continued on page 42

IN WESTERN POST: James D. Moore, appointed manager of western operations for Vitro Chemical Company, New York, a division of Vitro Corporation of America.

Benzene Installation: It's Confirmed by Dow

A benzene recovery plant for Dow Chemical Company, long rumored in the trade, has just been confirmed by Midland, Mich., headquarters. But Dow neither confirms nor denies a capacity estimate of 30 million pounds yearly.

The new plant, located at Freeport, Tex., will be capable of producing "a substantial part of the benzene requirements for styrene processing by the Texas division," Dow says.

The plant is slated to go on stream

—Continued on page 47

Korean Fertilizer Group Asks Ammonia, Urea Bids

The Korean Fertilizer Importers Association has invited bids for opening at 10 a.m., March 18 for the purchase of $678,638 worth of ammonium sulfate and urea. Details of the invitation are contained in a cable published last week in ICA Bulletin No. SBC 61-65.

ICA also revealed that Viet Nam is seeking bids by March 21 for purchase of about 48,500 tons of fertilizer materials, including 40,000 tons tricalcium phosphate.

Indonesia Seeks Bids on Fertilizer, But How Much?

Indonesia is in the market again seeking bids from American suppliers for large quantities of fertilizer materials for early delivery. A total of 388,000 tons of fertilizer is called for in the latest tender, but some in the trade express skepticism as to whether Indonesia will actually absorb this much.

Taking a liberal view of its requirements, the country has often doubled them in order to get the best possible prices, trade sources say.

What Indonesia Is Seeking

Cable advices to the Department of Commerce state that Mira Sari, Indonesian government trading company, is inviting bids on 74,000 tons of urea; 60,000 tons of fused magnesia; 103,000 tons of single superphosphate; 16,000 tons of double superphosphate; 10,000 tons of triple superphosphate, and 125,000 tons of ammonium sulfate.

No bid deadline has been set but quotations, f.o.b. and c.&f., should be submitted as soon as possible.

The quantities sought are understood to be in addition to the 200,000 metric tons of fertilizer sought last November (OPD, 11/9/60) which was to be delivered beginning in February, although Commerce officials thought there might be some duplication.

Firm information is lacking on how much, if any, of the 200,000 metric tons has been contracted for from American suppliers. But, according to informed sources, most of the tender was filled by European suppliers, who were able to underbid American firms by a substantial margin.

The department says, in connection with this latest request for bids, that offers should be on the basis of the best possible prices for the specifications the producers can supply and in accordance with shipping schedules suitable to suppliers for whatever quantities may be available.

Merck Int'l Unit Slates UK Chemical Expansion

The Merck Sharp & Dohme international division of Merck & Co. will spend one-half million dollars this year to expand its Morson chemical manufacturing facilities at Ponders End, England.

This brings to $1.5 million the company's investment in this plant since acquiring Thomas Morson & Son, Ltd., in 1957.

Expansions at Morson have a two-fold aim, Merck says: to provide for new products arising out of Merck research and to meet increasing demand for existing products. "Amprol," a new coccidiostat introduced this year, is among the important new products being manufactured at Morson.

In addition to the expansion in chemicals, Merck last year increased by more than 200 percent its capacity for pharmaceutical production at the facilities of Merck Sharp & Dohme, Ltd., in Hoddesdon, England.

Int'l Minerals Acts On Bioferm—Finally

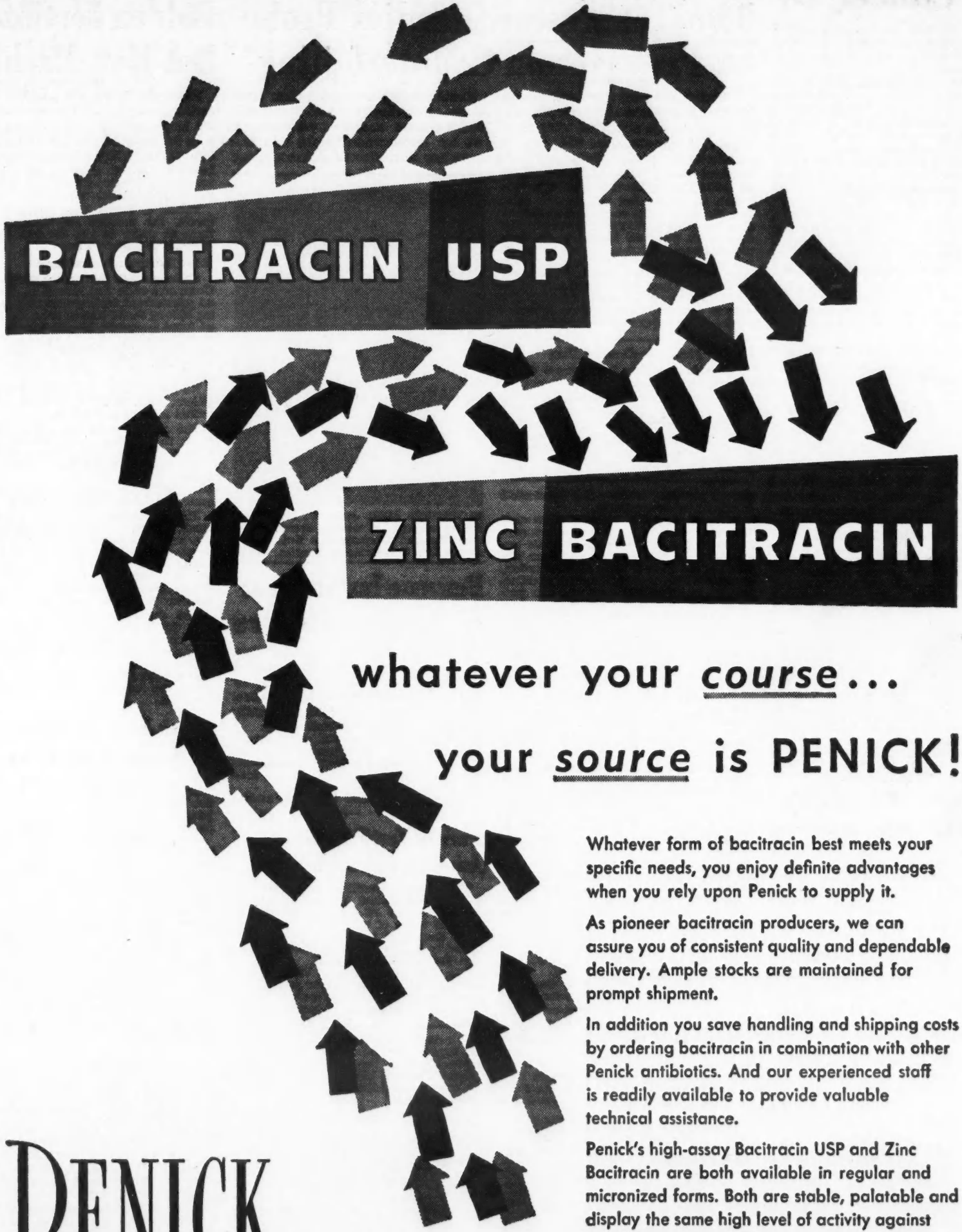
International Minerals & Chemical Corporation, with its eye on Bioferm Corporation for some time (OPD, 12/12/60) has finally acquired the Wasco, Calif., company. International Minerals has taken over Bioferm by exchanging 80,000 shares or its stock for all the outstanding shares of Bioferm.

Bioferm will operate under the Amino Division, which manufactures and markets the food-flavor enhancer, "Ac'cent."

IMC, based in Skokie, Ill., is a producer of plant food ingredients and a major maker of the feed ingredient, dicalcium phosphate.

Bioferm, a leading producer of Vitamin B_{12}, also has processes for antibiotics for the feed industry, and recently developed a microbial insecticide.

SALES EXECUTIVES IN NEW POSTS: Heyden Newport Chemical Corporation, New York, has made a number of organizational shifts in the sales structure of two of its units: Heyden Chemical Division and Newport Industries Division. F. A. Degener (left) has been appointed director of marketing and Walter C. Deakyne, jr., (center) has been made general sales manager for Heyden Chemical. Theodore H. Risch (right) has been chosen general sales manager for Newport Industries. In other appointments for the Heyden Chemical Division, James Claypool becomes field sales manager, E. L. Barkley takes over as manager of sales development and E. M. Vogel assumes district sales responsibility for New York and New Jersey. All the appointees are scheduled to take over their new positions on April 1.



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LOS ANGELES SAN FRANCISCO PORTLAND, ORE.

Cancer Drug: A Hope

Eli Lilly & Co. has introduced a new anti-cancer drug for treatment of Hodgkin's disease and choriocarcinoma.

The drug, "Velban," has shrunk tumors significantly in thirty-one out of thirty-four patients treated for Hodgkin's disease in clinical tests, the company reports.

Lilly emphasizes, however, that "there is no evidence that in any instance 'Velban' has cured Hodgkin's disease or any other form of human cancer."

Lilly's carefully-worded report on the drug, which was released after the company's stock had climbed thirty-two points in two weeks on a Wall Street rumor that Lilly had a "cancer cure," also includes a warning that treatment must be individualized, starting with a very low dose level.

This is because the drug's action against white blood cells—or leukopenic response—has been found to be highly variable.

"Velban" is the sulfate salt of vinblastine (VLB), an alkaloid derived from the periwinkle, a garden shrub. It is said to represent an entirely new class of onocolytic agent.

Although the drug is still being investigated for use in other types of cancer, it has been released for treatment of only the two kinds mentioned.

Following is the Indianapolis, Ind., company's summary of clinical trial results in thirty-four cases of generalized Hodgkin's disease:

• Significant tumor shrinkage and clinical improvement were observed in thirty-one of thirty-four patients. Twenty-six of the

—*Continued on page 73*

Chemical Expansion Plans for '61; They Look Just Like Last Year's

Chemical producers are moving ahead with plans for new plants and equipment expenditures—and they are moving the same way they moved last year. Estimates prepared jointly by the Department of Commerce and the Securities & Exchange Commission show industry intentions to invest about $400 million in capital improvements in the second quarter—the exact amount spent for this purpose a year ago.

Furthermore, the report of the two agencies shows that in the first quarter of this year, chemical producers spent $330 million for plants and new equipment — also the exact amount of investment in capital improvements in the first three months last year.

Interpreted another way, however, the trend might be said to be tending downward in this industry. Seldom have the forecasts of industry intentions been carried out as expected, and even less often do industry capital investments exceed the amounts predicted.

Last December when the prediction was made for first-quarter investments, the figure set was $390 million. Now the report of the two agencies shows that the industry missed this mark by $60 million.

The slowdown in expansions reflected in the figures for the chemical industry

—*Continued on page 48*

NICHOLS MEDALIST: Dr. Peter J. W. Debye, who has received the William H. Nichols Medal of the American Chemical Society's New York Section. A Nobel prize winner, he is emeritus professor of chemistry at Cornell University.

U. S. Peroxygen Expands

U. S. Peroxygen Corporation, Richmond, Calif., manufacturer of organic peroxides, has expanded its plant facilities to triple output of its non-separating benzoyl peroxide past formulations.

Merck Welfare Funds Introduced in Florida

Merck Sharp & Dohme's welfare prescription program (OPD, 2/13/61) has been launched in Florida with presentation of the company's first monthly refund under the program to the state's Department of Public Welfare.

Florida thus becomes the first state in the nation to take advantage of the MSD proposal.

The refund, more than $3,000, represents 10 percent of total payments by the state to private pharmacies for Merck Sharp & Dohme prescription drugs provided by these pharmacies to welfare patients in January, 1961.

OPD Reports From Europe

Tetracycline's Prices Tumble As Heated Debates on Drugs Shake the British Parliament

British producers of tetracycline (three of them subsidiaries of American firms) are cutting the price of the drugs by 12 percent in the United Kingdom. The timing of the reductions isn't considered wholly coincidental, coming as it does immediately after ferocious Parliamentary debates over rising National Health Service drug bills, charges of "100 percent American profits" and demands for nationalization of the drug industry from some Labor Party politicians.

Cyanamid of Great Britain, Ltd., subsidiary of American Cyanamid Company, led off the tetracycline-cutting parade. Noting that it has invested about $5.6 million in the last three years, Cyanamid claims the cut reflects economies from continuous large-scale production.

$2 Million Saving Seen

The company estimates the 12 percent reduction will save the National Health Service $2 million a year on its drug bill.

Pfizer, Ltd. (subsidiary of Chas. Pfizer & Co.), E. R. Squibb & Sons, Ltd. (unit of Olin Mathieson Chemical Corporation) and Aspro Nicholas, Ltd., a large British drug firm, have gone along with the Cyanamid tetracycline cuts.

The thirteen American-owned ethical drug producers in Britain, holding an estimated 40-50 percent share of the British drug market, have received the bulk of the political criticism aimed at drug industry profits.

In words recalling scenes from the Kefauver hearings, some commentators have claimed that prices of such widely-prescribed drugs as tetracycline cost only two-thirds as much in France and Holland as they do in Britain.

For certain drugs in France, as well as for most industrial products, the periodic devaluations of the franc since World War II have had the effect of making wholesale and retail prices among the lowest in Europe.

The health debate was triggered by a Ministry of Health decision to cut its deficits slightly by doubling the cost of

—*Continued on page 73*

IN SALES POST: Robert S. McCambridge, named eastern regional sales manager for Victor Chemical Works, Chicago, a division of Stauffer Chemical Company. He succeeds Rainsford F. Cotten, who is retiring for reasons of health.

CCDA's Thursday Agenda Will Cover Varied Topics

Commercial Chemical Development Association has rounded up a panel of experts to discuss topics ranging from marketing to economics at its annual open meeting. The parley will be held this Thursday (March 16) at the Roosevelt hotel in New York.

Moderating the panel discussion, which will take up the morning session, will be G. L. Parkhurst, vice-president of Standard Oil Company of California, San Francisco. The subjects and participants are as follows:

Marketing, W. R. Koster, acting director, chemical and rubber division, Business & Defense Services Administration.

Engineering-construction, Ralph Landau, executive vice-president of Scientific Design Company, New York.

Research-development, L. W. Bass, vice-

—*Continued on page 54*

Polybutadiene Plant Set by Polymer Corp.

Polymer Corporation, Ltd., Sarnia, Ont., plans to build a multi-million dollar plant in its home town for the production of polybutadiene. Construction is scheduled to start this summer, production before the end of 1962.

A solution polymer pilot plant has been in operation in Sarnia since 1958, and has produced a variety of stereo specific polymers. In 1960, the capacity of the pilot plant for producing polybutadiene was increased to several tons per month, and this facility will continue to supply evaluation quantities until the commercial plant is in operation.

The design of the projected plant is sufficiently flexible that the facilities can be adapted to produce other stereo specific rubbers such as polyisoprene. The output of the plant, estimated to be 20,000 tons per year, will be sold in domestic and export markets.

The process will be carried out under licenses from Prof. Karl Ziegler of Ger-

—*Continued on page 48*

Association Meetings

ACHEMA 1961, German chemical engineering exposition and congress, Frankfurt am Maim, Germany, June 9-17.

American Chemical Society, national meeting, St. Louis, Mo., March 21-30.

American Institute of Chemical Engineers, Sheraton-Cleveland hotel, Cleveland, Ohio, May 7-10.

American Institute of Chemists, annual meeting, Statler hotel, Washington, D. C., May 10-12.

American Oil Chemists' Society, annual meeting, Sheraton-Jefferson hotel, St. Louis, Mo., May 1-3.

American Pharmaceutical Association, annual convention, Sherman hotel, Chicago, April 23-28.

American Society of Perfumers, annual symposium, Essex House, New York, April 13.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 25-30.

American Zinc Institute, annual meeting, Drake hotel, Chicago, May 1-2.

Animal Health Institute, annual meeting, Mayflower hotel, Washington, April 24-26.

Chemical Market Research Association, annual meeting, Plaza hotel, New York, May 17-18.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 15-17.

Chemurgic Council, annual conference, Sheraton-Gibson hotel, Cincinnati, Ohio, April 12-14.

Commercial Chemical Development Association, annual meeting, Roosevelt hotel, New York, March 16.

Commercial Chemical Development Association, annual outing, Bedford Springs hotel, Bedford Springs, Pa., May 24-25.

Drug,Chemical & Allied Trades Association, annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 14-17.

Electrochemical Society, Claypool hotel, Indianapolis, Ind., April 30-May 4.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, November 2-4.

Flavoring Extract Manufacturers Association, annual meeting, Savoy-Hilton hotel, New York, May 14-17.

International Congress on Pure & Applied Chemistry, Montreal, Canada, August 6-12.

Lead Industries Association, annual meeting, Drake hotel, Chicago, May 2-3.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 8-10.

National Agricultural Chemicals Association, annual meeting, Homestead, Hot Springs, Va., October 29-November 1.

National Paint, Varnish & Lacquer Association annual meeting, Statler-Hilton hotel, Washington, October 30-November 1.

National Petroleum Association, spring meeting, Sheraton hotel, Cleveland, Ohio, April 19-20.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 11-14.

Pharmaceutical Manufacturers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 30-May 3.

Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

Proprietary Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 14-17.

Society of the Plastics Industry, western section conference, del Coronado hotel, Coronado, Calif., April 26-28; national conference, Commodore hotel, New York, June 5-9.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, March 14.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 9-11.

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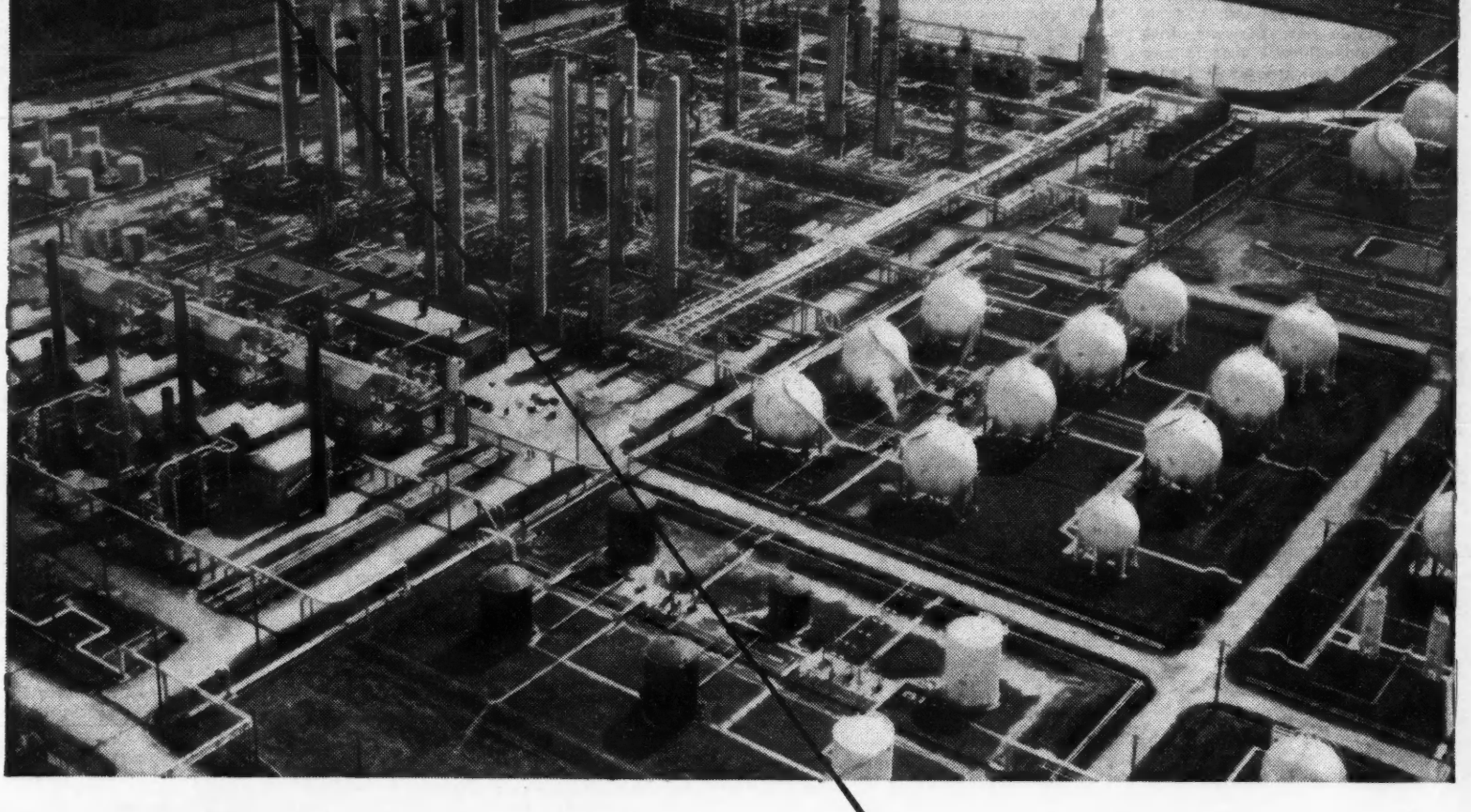

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Xylenes Capacity to Rise 101 Million Gallons in 1961 Due to Isomer Demand

OPD 'Depth' Report on Xylenes

—*Continued from page 3*

plant and, confident of its impending success, lowered the phthalic anhydride price.

But bugs developed in materials handling and the plant did not come on stream at the expected time. Aside from grumbling at low prices in the face of a shortage, the industry turned away from xylene as a raw material and interest faded again.

Then came the steel strike in 1959. This, plus a gradual shift in power emphasis in West Germany and other parts of industrial Europe from coal to petroleum, caused a shortage in naphthalene from which consumers are still trying to recover.

Scientific Design Pushed Ortho

Meantime, Scientific Design Company, a long-time proponent and designer of phthalic-from-ortho plants, sold a number of units overseas. Japan for one became an active customer. SD plants based on ortho are located in several parts of Europe today as well.

The Japanese were first to dip into available US o-xylene after it was discovered that a world-wide shortage of naphthalene existed. Then US producers, such as Allied Chemical Corporation and Monsanto, began to use sizable quantities in the latter part of 1959 and through most of 1960 to stretch available naphthalene in order to cover strong phthalic demand.

Despite this acceptance of o-xylene, and despite reports by Scientific Design that it has come up with a catalyst which promises yields comparable to those when naphthalene is used, US producers of phthalic anhydride are basing their expansions on naphthalene.

Hence it's obvious that the scurrying for increased ortho capacity here is for the purpose of getting the dollar of the overseas phthalic producer which can't get material in his own country.

But while 627 million pounds of o-xylene capacity are going up here in order to cover anticipated overseas (and, hopefully, domestic) business within the next two years, some 325-350 million pounds of petroleum naphthalene capacity and 43 million pounds of coaltar naphthalene capacity are also being built to cover the same demand.

At the same time, foreign enterprises aren't idle, either. Texaco (Canada), Ltd., is putting up a unit to make ortho, as well as para and ethylbenzene at Port Credit, Ont., Canada. Input is 1,500 barrels of feedstock a day.

Some Overseas Projects

Overseas projects include:

- France — ANTAR Petroles d'Atlantique, at Donges, 20 million pounds of o-xylene a year, on stream by midyear.
- Germany and the United Kingdom—A joint effort of California Chemical Company (which is linked to Oronite) and British Petroleum, Ltd., will produce 42 million pounds annually of o-xylene at two locations (along with 50 million pounds of p-xylene and 36 million pounds of ethylbenzene).
- Italy—Mobil Chimica Italiana is putting up a unit next to its Naples refinery to recover 39 million gallons of aromatics annually, of which 75 percent will be benzene and o-xylene.

These o-xylene installations are going up in countries which would otherwise furnish markets for US-made material.

Further, it's no secret that prospective US petroleum naphthalene producers, realizing that they'll have some to sell in excess of home needs, are scouring Enrope trying to peddle naphthalene.

Ashland Oil & Refining Company, whose "Hydeal" plant went on stream at Catlettsburg, Ky., last fortnight (OPD, 2/27/61), was able to ship half a million pounds of high-purity naphthalene at one fell swoop to eagerly awaiting customers.

Collier-Tidewater Chemical Company is building two seaboard plants: a 100-million-pound unit at Delaware City, Del., and a plant of like size at Los Angeles. Both installations lend themselves ideally to export markets, on a location basis alone.

Sun's Plant at Toledo

Sun Oil Company is erecting a 100-million-pound plant at Toledo, Ohio, and might put up another one at Marcus Hook, Pa., although the company is keeping quiet.

If strong rumors of US petroleum naphthalene overseas aren't bothersome enough to o-xylene producers, it's reported that one West German tar distiller is putting up a 110-million-pound naphthalene plant, slated to demethylate methylnaphthalene contained in tar.

Despite the strong preference for naphthalene both in the US and overseas, foreign producers have been forced to live with o-xylene because of chronic shortages of naphthalene, and, in some cases, to like it.

Japan reportedly relies more than 70 percent on ortho as feedstock for its phthalic plants. When the Soviet Union reneged on a naphthalene-for-phthalic deal with Italy, the latter swung more than 80 percent toward o-xylene. Germany is reported in the market for three-year ortho contracts now.

A heavy talking point among ortho producers is that, a couple of years hence when their plants are paid for, they can offer ortho for 4 cents a pound, compared to a current price of up to 6 cents.

But the big question which will arise with the end of current o-xylene contracts overseas is this: Which will get the business, naphthalene or o-xylene producers?

Champions of o-xylene argue that it can be shipped overseas liquid, rather than flaked and bagged or molten, as is naphthalene (this means cheaper transportation and handling).

Further, Scientific Design and others contend that theoretically — and, it's hoped, practically — higher yields of phthalic can be obtained using o-xylene than naphthalene.

In short, it's felt that technological breakthroughs combined with paid-off plants and a possible 2-cent drop in price will put o-xylene producers in a strong position within the next two years both here and overseas, come what may.

Plant Cost in Ortho's Favor

Another point mentioned in ortho's favor is comparative plant cost. Petroleum naphthalene plants cost about ten times as much, it's said, and this leaves them committed to a much longer payoff period.

Rebuttal to such arguments on behalf of o-xylene is not hard to find. Of the 250 million pounds of phthalic anhydride capacity expected to be built in the US this year, all of it is designed to use naphthalene.

Only Witco Chemical Company's pending plant at Perth Amboy, N.J., is designed to use o-xylene—and that only as an alternate starting material.

Experience is the best teacher, argue defenders of naphthalene. Several US producers have tried ortho in their plants and they don't like it. Only Oronite has shown the ability to use o-xylene and stay competitive all these years.

Further, it's believed that when naphthalene becomes more readily available here, overseas consumers will snap it up and abandon o-xylene in a minute.

Collier-Tidewater is reportedly building a naphthalene tanker, whose target is the Japanese market. Salesmen who canvassed the European market last summer report a continuing strong preference for naphthalene.

One German plant declined an offer of 4-cent ortho, it's said, preferring to stick with higher-priced naphthalene. Italy, while heavily committed to ortho now, reportedly would grab up any available naphthalene.

As domestic ortho capacity builds during the year, so will that for naphthalene. Ashland is already producing and, by 1962, some 325 million pounds of petroleum naphthalene capacity will be added to the 600 million pounds of coaltar naphthalene already available.

And, after a quiet period, coaltar naphthalene is stirring again. Bethlehem Steel Corporation will have a tar distillation plant on stream at its Sparrows Point, Md., plant late this year, capable of recovering 50 million gallons of tar annually.

The unit will furnish enough material to Allied Chemical's Frankford, Pa., works to make at least 43 million pounds of naphthalene per year, in addition to other tar acids.

Naphthalene Gets a Boost

The addition of this supply, plus other coaltar and petroleum naphthalene, will boost availability to 975 million pounds annually by next January 1.

This, added to 627 million pounds of o-xylene at a theoretical yield of 1·1, gives a total of more than 1.6 billion pounds. It's reckoned that this is enough to fill world, let alone US, phthalic needs next year—if PA units operate at capacity.

But in the US last year, despite phthalic shortages and a capacity figured to be in excess of 500 million pounds, twelve-month output reached 374.8 million pounds—considerably below potential.

Biggest month was March, during which 36.5 million pounds were turned out.

—*Continued on page 51*

ORTHOXYLENE VIES WITH NAPHTHALENE
Which Will Get the Phthalic Anhydride Business?

ORTHOXYLENE CAPACITY		*1962
Calif. Chemical	El Segundo, Calif.	30
Calif. Chemical	Richmond, Calif.	100
Cities Service	Lake Charles, La.	120
Cosden	Big Spring, Tex.	12
Delhi-Taylor	Corpus Christi, Tex.	70
Humble	Baytown, Tex.	175
Sinclair	Houston, Tex.	66
Suntide	Corpus Christi, Tex.	32
Tennessee Oil	Chalmette, La.	22
Total		627

NAPHTHALENE CAPACITY		*1962
Petroleum:		
Ashland	Catlettsburg, Ky.	75
Collier	Los Angeles	50
Collier	Wilmington, Del.	100
Sun	Toledo, Ohio	100
Coaltar:		
Koppers, Allied, US Steel, Bethlehem, Reilly Tar, Pittsburgh Coke, Witco and others		650
Total		975

*Capacity figured in millions of pounds

US Phthalic Anhydride Capacity in 1962 ..... 800 million lbs.

PARAXYLENE EXPANSION SURGE
Polyester Fiber, Film to Take More

		1/1/61 (Millions of Pounds)	1/1/62
Calif. Chemical	Richmond, Calif.	25	41
Calif. Chemical	El Segundo, Calif.	35	69
Humble	Baytown, Tex.	65	105
Phillips	Big Spring, Tex.	5	5
Signal	Houston, Tex.	—	*15
Sinclair	Marcus Hook, Pa.	15	15
Sinclair	Houston, Tex.	60	60
Total		205	310

*In planning stage

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1963	94.4 million gals.
1962	86.8 million gals.
1961	56.9 million gals.
1960	45.4 million gals.
1959	32.6 million gals.
1958	19.9 million gals.
1957	16.7 million gals.

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, March 10 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

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Acacia (see Arabic gum).
Acetaldehyde, 99%, dms., c.l., frt. alld lb. .12 - —
dms., l.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld lb. .10 - —
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Acetaldol (see Aldol)
Acetanilide, tech. flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls. bgs. ton lots, frt alld. lb. .33½- —
bbls. bgs. smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, comi. or redist. 28%, bbls 100 lbs 4.80 - —
56% bbls. ..... 100 lbs 8.25 - —
70% bbls. ..... 100 lbs 9.95 - —
80% bbls ..... 100 lbs 10.45 - —
Acetic acid, glacial, syn., CP, dms., c.l., dlvd. E 100 lbs. 18.75 - —
tech., dms., c.l., dlvd. E. 100 lbs. 13.75 - —
dms., l.c.l., dlvd. E 100 lbs. 15.25 - —
tanks, dlvd. E 100 lbs 10.00 - —
USP, tanks, dlvd. E 100 lbs. 13.00 - —
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Acetic anhydride prices 1c. higher in West.
Acetoacetanilide fib dms., c.l., dlvd lb. 80 —
fib dms. l.c.l. dlvd lb. 81 —
Acetoacet-o-chloroanilide, fib dms., c.l. dlvd lb 1.35 —
fib dms., l.c.l. dlvd lb 1.36 —
Acetoacet-o-toluidide fib dms., c.l., dlvd lb 82 —
fib dms., l.c.l. dlvd lb. 83 —
Acetone, CP, dms., c.l., dlvd lb 10½- —
dms., l.c.l., dlvd lb. 12 —
tanks, dlvd. lb. 08 —
Acetonitrile, dms., c.l., frt. alld lb. .34½- —
dms., l.c.l., frt. alld lb. .35 - —
tanks, frt. alld lb. .32 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1,000 lbs. frt alld lb 1.22 —
Acetophenone cns dms lb 42 1.30
Tech., dms., c.l., works ..... lb 47 —
dms., l.c.l. works ..... lb 47¾- —
tanks, works lb. 45 —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb 1.30 —
dms., 1,000-lb. lots, same basis lb. 1.40 - 1.45
dms., 100-lb lots, same basis lb 1.54 1.57
Acetylene, black, imp. drums, c.l. duty and freight extra lb .20 —
cs., l.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more f.o.b works lb 83 —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd (80 mesh) 250-lb dms. c.c. pt. or shipt. lb. 56¼ —
USP 10% starch granulation, 12-50 mesh white, 50-lb dms., c.l., same basis lb 56¼ —
(Pink and green granulations 5c. per lb higher.)
Freight equald shipt identical quantity over standard routes, from N.Y., Phila. Midland, Mich., Chicago and St. Louis
Acetyltributyl citrate, tech., non-ret dms c.l. frt alld E of Denver lb. .35½- —
non-ret dms. l.c.l., frt. alld E. of Denver lb. .36½- —
tanks frt alld E of Denver. lb. .33 —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret dms., l.c.l. frt allld. E. of Denver lb 40½- —
tanks, frt alld. E of Denver lb. .37 —

ACIDS
Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb .50 .55
Acrolein, tech., dms., c.l., works lb 36 —
dms., l.c.l., works lb. 36¾ - —
tanks, works lb. .31 —
Acrylamide, dms t.l., f.o.b. works lb. 58 —
dms., t.t.l. same basis lb 60 —
Acrylic acid, glacial, dms c.l., t.l., dlvd lb. .42½ —
dms., l.c.l., t.t.l., dlvd lb. 43½ —
tanks, dlvd. lb. 40 —
tech., esterification, tanks, frt allowed basis lb. .38 —
tech., polymerization, tanks, same basis lb. .38 —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. 26 - —
dms. l.c.l., t.t.l., frt. alld lb 27 - —
tanks, frt. equald lb 23 —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs., l.c.l., dlvd. .... lb. .35 —
Agar, USP Kobe No. 1, strip, bls lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms. 100-lbs or more, f.o.b works lb 5.25 - —
dms. 1-99 lbs., same basis lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech. fib. dms. c.l., t.l. dlvd lb .99 - —
fib dms., l.c.l. dlvd lb 1.04 - —

ALCOHOLS
Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c higher W of Rockies
Allethrin, 90%, dms., frt. alld lb 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt alld lb. 6.50 6.55
2½% dms frt alld. lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,4[illegible] lbs. works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs works. lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd lb. .17½- —
dms., t.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat. bitter, f.p.a. bots. lb 2.75 3.45
NF, bots. ..... lb 3.00 3.30
sweet, USP, cns., dms. ..... lb. .60 - .70
Aloe, Cape, cs. ..... lb. 35 - .40
powd cs ..... lb .60 .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —

Abbreviations
Used in OPD Market Quotations

alld	allowed	distr.	distributor	No.	number
amorph	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz	ounce
		E.	east	p-	para
a.p.a	available phosphoric acid	e.p.	end point	Pac.	Pacific
approx.	approximately	equald.	equalized	pf	proof
artif	artificial	exp.	expressed	phos.	phosphate
ASTM	American Society for Testing Materials	Ext.	external	photo.	photographic
		F	fahrenheit	pkgs.	packages
Atl.	Atlantic	ferment.	fermentation	powd.	powdered
Be.	Baume	f.f.a.	free fatty acid	precip.	precipitated
bbls.	barrels	f.f.c.	free from chlorine	prod.	producer
bgs.	bags	fib.	fiber	pt.	point
bls.	bales	f.o.b.	free on board	pulv.	pulverized
bots.	bottles	f.p.a.	free of prussic acid	purif.	purified
b.p.	boiling point	frt.	freight	redist.	redistilled
b.p.l.	bone phosphate of lime	gal.	gallon	refd.	refined
b.r.	boiling range	gran.	granular	refy.	refinery
bxs.	boxes	grd.	ground	reg.	regular
C.	centigrade	i.&a.	iron and aluminum	resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured	imp.	imported	SD	specially denatured
c.i.f.	cost, insurance, freight	incl.	included	s.d.	single distilled
cks.	casks	indust.	industrial	S.E.	southeast
c.l.	carlots	kgs.	kegs	sec.	secondary
cns.	cans	l-	laevo	secs	seconds
coml.	commercial	lacq.	lacquer	s.g.	specific gravity
conc.	concentrated	lb	pound	shipt.	shipment
CP	chemically pure	l.c.l.	less carlots	soln.	solution
cps.	centipoises	l.t.l.	less truckload	s.u.	standard unit
cryst.	crystalline	liq.	liquid	syn.	synthetic
cs	cases	mfrs.	manufacturers	tanks.	railroad tankcars
ctns.	cartons	m-	meta	tech.	technical
cyls.	cylinders	m.a.p.	mixed aniline point	tert-	tertiary
d-	dextro	min.	minimum	t.l.	truckloads
dbl.	double	m.p.	melting point	t.w.	tankwagons
denat.	denatured	N-	nitrogen	USP	U.S. Pharmacopoeia
dest-dist.	destructively—distilled	n-	normal	vis.	viscosity
dl-	dextro-laevo	nat.	natural	VM&P	varnish makers & painters
dist.	distilled	neut	neutral	W.	west
		NF	National Formulary	whse.	warehouse
		NNR	New and Nonofficial Remedies	w.w	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Alcin, USP, bbls., dms., kgs lb 3.25 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium gran. bgs., works 100 lbs 4.30 - —
Lump, dms., works .... 100 lbs 5.05 - —
Powd. dms. works .... 100 lbs 5.20 - —
USP, burnt., dms ..... lb. .20 .21
hydrous, dms ..... lb. .07¾- .08
Alum potassium, gran. bgs. works. 100 lbs 4.55 - —
Lump, dms., works .... 100 lbs 5.30 - —
Powd. dms., works ..... 100 lbs 5.45 - —
USP burnt., dms ..... lb. .20 .21
USP hydrous dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ... lb. .17 —
Alumina, calcined bgs. c.l., works. lb. .0535- —
bgs., l.c.l., works ..... lb. .056 - .0839
Aluminum acetate, basic soln., 24%, bbls. l.c.l works lb. .14 —
Aluminum chloride coml. anhyd., dms., c.l., works, frt equald lb. .16 - —
dms. l.c.l. works lb 16½- —
cryst. dms. c.l works 100 lbs 21.00 —
dms., l.c.l. works 100 lbs. 21.50 —
Soln., 32° cbys. c.l., works lb 0495- —
cbys., l.c.l., works lb. .0570- .1098
tanks, works 100 lbs. 3.95 —
NF, gran. dms. works lb. .31 .39
Aluminum fluoride tech., anhyd., bgs., c.l. works lb. .16¼ —
bgs., t.c.l. works lb. .17¼- .19¼
bulk, c.l. basis 80% lb. .14½ —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs. 11.00 - —
containers extra t.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Light, bgs., c.l., t.l., works ..... lb. .09½- —
bgs., t.l., to c.l., works ..... lb. .10½- —
bgs., l.t.l., works ..... lb. .11½- —
Aluminum hydroxide, dried, USP XV fib dms., works lb. .82½- —
fib dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms. works. lb. .19 - —
fib dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate)
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2810- —
50-lb pigs, 10,000-lb lots, frt allld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined)
Aluminum paste lining, extra-fine, dms lb. .71 - —
Standard grade, dms lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb 1.13 —
Standard grade, dms lb 83 —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c per lb. for 50-lb dm., 3c. per lb. for 10 lb. can and 5c to 12c. per lb. for smaller containers. Deduct 1c per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c for 30,000 lbs. or more. Where destination is within the continental U.S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or more.
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton. 41.00 - —
bulk, c.l., same basis ton. 40.00 - —
lump, bgs., c.l., same basis ton. 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., t.c.l., works, frt. equald. 100 lbs. 4.30 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 1.60
Aminoazotoluene base, bbl., 100% basis lb. 1.15 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb 1.72 —
2-Amino-4-chlorophenol, tech., solid, dms., frt. allld lb. 2.15 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. allld lb. 3.00 —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., t.c.l., dlvd lb. .49 - —
tanks, dlvd. lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. allld lb. .44 - —
dms., t.c.l., frt. allld. lb. .45 - —
tanks, frt. allld. lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms. smaller lots. lbs. 2.50 - —
p-Aminophenol, dms., frt. allld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. allld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer tanks, works, frt. equald E. of Rockies ton. 92.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ton. 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E of Rockies ton. 95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 8.25 —
bgs. t.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb .40 —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton 325 - —
dms., ton lots, ex whse. 100 lbs. 22.86 - —
dms., smaller lots, ex [illegible] 100 lbs. 24.11 - —
Ammonium bicarbonate, dom., tech., c.l., works 100 lbs 7.00 - —
dms., t.c.l., works ..... 100 lbs. 9.00 - —

Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, cms., dlvd lb. .2145 - .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l lb. .15½ - —
Ammonium chloride, white, tech., fine gran., bgs. c.l., works 100 lbs 6.00 - —
bgs. l.c.l., works 100 lbs 8.00 - 8.45
USP gran., 250-lb dm lb. .17¼ - —
Ammonium citrate dibasic, 250-lb. dm. f.o.b. works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.51 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½ - —
dms., t.l.l. frt. alld lb .21½ - —
tanks, frt. alld lb. .19½ - —
Ammonium lignin sulfonate, bgs., c.l. works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80% dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400 lb dms. 15,000-lbs works. lb. 1.22 - —
400-lb dms. 2,000-lb contracts, works lb 1.23 - —
400-lb dms. works lb 1.24 - —
Ammonium nitrate, dom., fertilizer grade 33.5% N bgs. f.o.b works ton.67.00 - —
Ammonium nitrate, dom., with dolomite 20.5% N, bgs. c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point frt. equald to $3 ton base price ton.70.00 - —
Ammonium oxalate, tech., fine gran. 250-lb dm., f.o.b works E lb. .28½ - —
Tech. powd. 200-lb dm., same basis lb .28½ - —
Ammonium pentaborate, gran. bgs., c.l. works ton 193.00 - —
bgs., ton lots, ex whse 100 lbs.15.27 - —
bgs. smaller lots, ex whse 100 lbs.16.52 -18.52
Ammonium pentaborate powder $10 per ton higher in bags
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms. smaller lots, works lb. .20 - .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼ - —
bgs. l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dihasic, tech. bgs., c.l., works, frt. alld lb. .09¼ - —
Ammonium silicofluoride, dms., works lb. .12¼ - .13¼
Ammonium sulfamate, bgs. c.l., t.l., works lb. .19 - —
bgs. l.c.l. works lb. .20½ - .27
Ammonium sulfate standard granular bulk f.o.b works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb bgs., f.o.b. works lb. .08½ - —
Large granular bulk c.l. works ton.35.00 - —
bgs. c.l., works ton 40.00 - —
Tech., bulk c.l., t.l., works ton 52.00 - —
bgs. c.l., t.l., works ton 56.00 - —
bgs. l.c.l. t.l. works 100 lbs 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald, 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate tech. cryst. dms. c.l. works lb. .20 - —
dms. l.c.l. works lb. .22 - .26
Tech. soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼ - —
Ammonium thioglycolate, comi., 55-gal. dms., fob lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic dms lb 17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb 4.50 - 6.00
d-Amphetamine phosphate, fib dms. 100-lb lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib dms., lb 4.20 - 5.60
Amyl acetate ex fusel oil, tech. dist. from 125° to 150°C., dms. c.l., frt alld E. of Rockies lb .18½ - .19
dms., l.c.l. same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate ex pentane, reg., dms., c.l., dlvd lb. .19 - —
dms., t.c.l., dlvd lb. .21½ - —
tanks, dlvd lb. .16½ - —
tech. dms., c.l. dlvd. lb. .17 - —
dms. l.c.l., dlvd lb. .18½ - —
tanks, dlvd lb. .14½ - —
Amyl acetate, syn. oxo process, dms., c.l., dlvd lb. .19 - —
dms., c.l. dlvd lb. .20½ - —
tanks, dlvd lb. .16½ - —
Amyl alcohol ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128° 132°C., dms., l.c.l., dlvd lb. .43½ - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½ - —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., t.c.l., frt. alld lb. .20½ - —
tanks, frt. alld lb. .16½ - —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼ - —
dms., t.c.l. frt. alld lb. .21¾ - —
tanks, frt. alld lb. .17¾ - —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., t.c.l., same basis lb. .20½ - —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., t.c.l., frt. alld. E. lb. .18½ - —
tanks, frt. alld E lb. .14½ - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½ - —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½ - —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .68 - —
Amyl n-butyrate dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde dms lb 1.70 - 2.20
p-tert Amyl phenol, dms. c.l., works. lb. .28 - —
dms., t.c.l., works lb. .29 - —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms lb. 1.50 - —
Anethol, tech., dms. lb. .80 - .82
USP, cns, dms lb. 1.05 - —
Angelica root, bls lb. .90 - 1.00
Angelica root oil, bots lb. 120.00 -140.00
Angelica seed oil, bots lb 120.00 -130.00
Aniline dms. c.l., frt. alld lb 20 - —
dms., t.c.l., frt alld lb 21 - —
tanks, frt alld lb .18 - —
Aniline oil (see Aniline).

Aniline salt, dms., c.l., t.l., 30,000 lbs. min., frt. alld lb. .32 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms lb. 1.90 - 2.00
Anise seed, Turkish, bgs. lb. .24 - —
Spanish, bgs. lb. .28 - —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 80-95%, dms., c.l., t.l. f.o.b., works lb. .42½ - —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99% 150-lb. dms., dlvd lb 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt. alld lb. .70 - —
bbls., l.c.l., same basis lb. .73 - —
Electrical grade, bgs. l.c.l., same basis lb 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½ - —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½ - —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .28
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, t.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½ - —
USP, powd., 250-lb. dm., same basis lb. .74½ - —

Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
1-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
1-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 - —
1-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½ - —
bbls., l.c.l. works lb. .06½ - .07¼
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).

Asbestos, Canadian crude
6D, c.l (30 tons) mines ton 86 00 —
7D, c.l (30 tons) mines ton 75 00 —
7F, c.l (30 tons), mines ton 71 00 —
7H, c.l (30 tons) mines ton 61 00 —
7K, c.l (30 tons) mines ton 50 00 —
7M, c.l (30 tons) mines ton 44.00 —
7R, c.l. (30 tons) mines ton 43 00 —
7RF c.l (30 tons) mines ton 44 00 —
7T, c.l. (30 tons), mines ton 41 00 —
7TF c.l. (30 tons) mines ton 44.00 —
Asbestos prices are in Canadian funds; l.c.l lots $4 per ton higher
Ascorbic acid, USP dms. 100-kilos kilo. 6.80 - —
dms., less than 100-kilos kilo. 7.05 - 7.80
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F fusing pt., bgs., c.l., mines ton.43.00 - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½ - —
emulsion, tanks, tankwagon refy gal. .09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).

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Atropine—Bone Phosphate

Atropine, NF, tins	oz.	6.50	7.50
Atropine sulfate USP, bots	oz	5.25	5.75
Azelaic acid, bgs., c.l., dlvd.	lb.	.40	—
bgs. ton lots, same basis	lb.	.41	—

B

Bacitracin, sterile, over 500,000,000 units, 50,000 units.		.90	—
non-sterile, over 500,000,000 units, 50,000 units.		.65	—
Balm of Gilead buds dried, bgs	lb	1.25	1.35
Barberry root bark, bgs	lb	1.00	1.10
Barbital, NF, 100-lb dms., f.o.b. works	lb	4.50	—
Barbital sodium, NF, 100-lb dms.	lb.	4.75	—
Barium carbonate, precip., bgs., c.l., works	ton	111.50	—
bgs., smaller lots, works	ton	126.50	—
Barium chlorate, dms., works	lb	.32	.41
Barium chloride anhyd., bgs., c.l., works	ton	176.00	—
bgs., l.c.l., works	ton	196.00	—
NF, cryst., dms., 400-lbs., works	lb	23	—
Tech., cryst., bgs., c.l., works, 100 lbs		7.00	—
bgs., l.c.l., works	100 lbs	8.00	—
Barium chromate, bgs., frt. equald.	lb.	.38	—
Barium dioxide (see Barium peroxide).			
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald	ton	208.00	—
bgs., l.c.l., t.l., frt equald	ton	218.00	—
Barium monohydrate, 99%, bgs., c.l., frt. equald	100 lbs.	11.25	—
bgs., l.c.l., frt. equald	100 lbs.	11.75	—
Barium monoxide (see Barium oxide).			
Barium nitrate, bbls. c.l., t.l., dlvd	lb.	.16	—
bbls., l.c.l., t.l., dlvd.	lb.	.17	—
Barium oxide, grd. dms., c.l., t.l., frt equald	ton	275.00	—
dms., l.c.l., t.l. frt equald	ton.	285.00	—
Barium peroxide, dms. frt equald.	lb	.20	—
Barium stearate, ctns. c.l., frt alld.	lb.	.41	—
ctns., l.c.l. same basis	lb.	.42	.46
Barium sulfate, tech (see Barytes and blanc fixe).			
Barium sulfate, X-ray, 100-lb dm.	lb.	.19	—
Barium sulfide, dms., c.l., works	ton.	100.00	—
dms., l.c.l., works	ton.	110.00	—
Barytes, southern, off-color, bgs., mines	ton	30.00	—
95-75%, bgs., mines	ton.	30.00	—
white, water-grd., paper bgs., c.l. St. Louis	ton.	60.00	60.25
paper bgs., ex whse New York	ton	84.85	—
Battery acid, cbys., c.l., works E.	100 lbs	2.35	—
cbys, l.c.l., works, E.	100 lbs.	2.65	10.95
Bauxite, bulk, mines	ton.	7.00	10.00
Bay oil, NF, Puerto Rican, 50-55%, cns.	lb.	3.25	—
55-60%, cns.	lb.	3.60	—
NF, West Indian, 50-55%, cns. dms.	lb.	3.75	—
Bayberry wax, bgs	lb.	.65	.70
Beeswax, crude, African, bgs.	lb.	.54	.55
Brazilian, bgs.	lb.	.58	.59
Central American, bgs.	lb.	.57	.58
Chilean, bgs.	lb.	.59	Nom.
Refd., USP, bleached white, bricks 100-lb. ctns	lb.	.67	.69
white, slabs, 100-lb. ctns	lb.	.66	.68
yellow, bricks, 100-lb. ctns	lb	.59	.61
yellow, slabs, 100-lb. ctns	lb	.58	.60
Belladonna leaf, bls.	lb.	.24	.26
Belladonna root, bls	lb.	.35	.38
Bentonite, dom. 200 mesh, bgs., c.l., mines	ton.	14.00	—
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse	ton.	95.20	—
bgs., 1-ton lots, ex whse	ton.	99.00	—
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse	ton.	93.40	—
bgs., 1-ton lots, ex whse	ton.	97.16	—
Benzal chloride, cbys., works	lb.	.44	—
Benzaldehyde, NF, dms.	lb.	.74	—
Tech., dms., c.l., t.l.	lb.	.42	—
dms., l.c.l.	lb.	.44	—
Benzene, pure or nitration, tanks, works: Baton Rouge, La.	gal.	.34	—
Bethlehem, Pa.	gal.	.34	—
Birmingham district	gal.	.34	—
Chicago district	gal.	.34	—
Cleveland district	gal.	.34	—
Geneva, Utah	gal.	.34	—
Houston, Tex.	gal.	.34	.40
Johnstown, Pa.	gal.	.34	—
Benzene, pure or nitration, tanks, works: Lorain, Ohio	gal.	.34	—
Middletown, Ohio	gal.	.34	—
Mennequa, Colo.	gal.	.34	—
Philadelphia district	gal.	.34	—
Pittsburgh district	gal.	.34	—
Port Arthur, Tex.	gal.	.34	—
Benzene, pure or nitration, tanks, works: St. Louis, Mo. District	gal.	.34	—
Sparrows Point, Md.	gal	.34	—
Syracuse, N. Y.	gal.	.34	—
Terre Haute, Ind.	gal.	.34	—
Youngstown, Ohio	gal.	.34	—
Lackawanna, N. Y.	gal.	.34	—
Lone Star, Tex.	gal.	.34	—
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).			
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit.		.0075	—
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit.		.0065	—
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit.		.0075	—
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit.		.0056	—
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis	lb.	1.19	—
bbls., l.c.l., same basis	lb.	1.21	—
Benzidine sulfate, tech., bbls., frt. alld., 100% basis	lb.	1.21	—
Benzidine yellow, AAA, bbls., dlvd.	lb.	2.20	—
AAOT, bbls., dlvd.	lb.	2.55	—
Lightfast, bbls., dlvd.	lb.	3.40	—
Benzocaine, dms., 100-lbs., frt alld.	lb.	3.25	—
Benzoic acid, tech., dms., c.l., t.l., frt. alld	lb.	.25	.37
dms., l.t.l., same basis	lb.	.29	.41
tanks, same basis	lb.	.21	—
USP, bbls., dms., ton lots	lb.	.48	—
bbls., dms., 1,000-lb lots	lb.	.50	—

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs.	lb.	.32	—
Benzophenone, dms	lb.	1.35	1.40
Benzotriazole, tech dms., 1,000-lb. lots, works	lb.	1.95	—
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald	lb.	.21	—
cbys., smaller lots, frt. equald	lb.	.23	—
Benzoyl chloride, cbys. dms., c.l., works, frt. equald	lb.	.22	—
cbys., l.c.l., same basis	lb.	.23	—
tanktrucks, dlvd Metropolitan area	lb.	.21	—
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works	lb.	.98	1.08
Benzyl acetate, f.f.c., cns., dms	lb.	.54	—
Benzyl alcohol, NF, dms	lb.	.54	—
Tech., dms., dlvd	lb.	47½	.65
Benzyl benzoate, USP, 40-lb dms.	lb.	.62	—
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald	lb.	.23	—
dms., l.c.l., same basis	lb.	.24	—
tanktrucks, dlvd., Metropolitan area	lb.	.21	—
Benzyl cinnamate, cns	lb.	3.80	4.00
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld	lb.	1.25	—
12-49 dms., same basis	lb.	1.35	—
1-11 dms., same basis	lb.	1.90	—
Benzyl formate, cns.	lb.	1.70	1.85
Benzyl isoeugenol, cns.	lb.	8.20	8.30
Benzyl propionate, bots.	lb.	1.30	1.35
Benzyl salicylate, bots	lb.	1.50	1.85
Benzylidine acetone, bots	lb.	1.65	1.75
Benzylidine chloride (see Benzal chloride).			
Berberine bisulfate, cns	lb	56.50	—
Berberine hydrochloride, bots	lb	56.50	—
Bergamot oil, nat. NF, Italian, cns.	lb.	11.00	12.00
Betagammapicoline (see b,g-Picoline).			
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).			
Betamethylnaphthalene (see Methylnaphthalene)			
Betanaphthol (see b-Naphthol).			
Betanaphthylamine (see b-Naphthylamine)			
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).			
Betaphenylethylamine (see b-Phenylethylamine)			
BHC (see Benzene hexachloride tech.).			
Biotin cryst., bots	gram	10.00	—
Biphenyl (see Diphenyl)			
Birchtar oil, crude, cns.	lb.	1.50	1.90
Rectified, cns	lb	1.75	2.00
Bismuth chloride, jars	lb	5.11	—
Bismuth hydroxide, dms	lb.	4.60	4.65
Bismuth metal, bxs, ton lots	lb.	2.25	—
Bismuth nitrate, cryst., 200-lb. dm.	lb.	2.25	—
Bismuth oxychloride, 25-lb. dm., f.o.b. works	lb.	4.92	—
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works	lb.	3.70	—
Bismuth subgallate, NF, 200-lb dm., f.o.b. works	lb.	3.58	—
Bismuth subiodide, fib. dms	lb	5.37	—
Bismuth subnitrate, NF, 200-lb dm., f.o.b., works	lb.	3.10	—
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works	lb.	4.15	—
Bismuth trioxide, 100-lb. dms., f.o.b. works	lb.	4.40	—
Bismuth-ammonium citrate, USP, powd., jars	lb.	4.22	—
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs or more, frt. alld	lb.	.30½	—
bgs., c.l., t.l., less than 70,000 lbs., same basis	lb.	.31	—
bgs., l.c.l., same basis	lb.	.32½	—
Blackberry root bark, bls	lb.	.50	.55

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works	ton.	160.00	—
bgs., l.c.l., works	ton.	170.00	—
bgs., l.c.l., New York whse	ton.	215.00	—
Blood, dried 16-16½% ammonia, bgs., New York unit	ton.	5.50	—
Bloodroot, bls.	lb.	.85	.90

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)			
Blue vitriol (see Copper sulfate)			
Bois de rose oil, Brazilian, dms	lb.	2.05	—
Peruvian, dms.	lb.	1.65	—
BON acid maroons, pure, bbls	lb.	1.75	—
Resinated, bbls.	lb.	1.50	—
Bone black, dms., c.l., frt. alld	lb.	.1750	.2225
l.c.l., works	lb.	.1950	.2425
Pacific coast bone black prices 3¼c. per lb. higher			
Bonemeal, steamed, works, f.	ton	80.00	—
Bone phosphate defluorinated of lime (see Defluorinated phosphate).			
Bone phosphate, precip (see Calcium phosphate, tribasic).			

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Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.67 - —
bgs., smaller lots same basis 100lbs. 8.91 -10.91
bulk, c.l., works ton 83.00 —
Borax, tech., gran., decahydrate, 99½% bgs. c.l., works. ton 50.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 5.31 - —
bgs. smaller lots same basis 100 lbs. 6.56 - 8.56
bulk, c.l., works ton 43.50 —
pentahydrate, 99½%, bgs., c.l., works ton 64.50 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 6.12 - —
bgs. smaller lots same basis 100 lbs. 7.37 - 9.37
bulk, c.l., works ton 58.00 —
USP powd. bgs. c.l., works ton 54.00 - —
bgs. ton lots ex whse, New York or Chicago 100 lbs. 6.57 - —
bgs. smaller lots same basis 100 lbs. 7.82 - 9.82
Bordeaux powder tribasic bgs. c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb .26 - —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton 335.00 - —
bgs. ton lots ex whse, New York or Chicago 100 lbs. 21.27 - —
bgs. smaller lots same basis 100 lbs. 22.52 -24.52
cryst. 99.9% bgs. c.l. works ton 163.50 —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 11.67 - —
bgs., smaller lots, same basis 100 lbs. 12.92 -14.92

Boric acid, tech., cryst., 99.9%, dms., c.l., works ton 188.50 - —
dms., ton lots, ex whse., New York or Chicago 100 lbs. 13.17 - —
dms., smaller lots, same basis 100 lbs. 14.42 - —
Boric acid, gran., 99.9%, bgs., c.l., works ton 112.00 - —
bgs., ton lots, ex whse New York or Chicago 100 lbs. 8.78 - —
bgs. smaller lots, same basis 100 lbs. 10.03 -12.03
dms. c.l., works ton 137.00 —
dms, ton lots, ex whse, New York or Chicago 100 lbs. 10.29 - —
dms. smaller lots same basis 100 lbs. 11.54 - —
bulk, c.l., works ton 106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago 100 lbs. 9.20 - —
bgs., smaller lots same basis 100 lbs. 10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs. 10.71 - —
dms., smaller lots, same basis. 100 lbs. 11.96 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride CP 1,800-lb. cyls., works lb 1.25 - —
100-lb. cyls., works lb 1.70 - —
Boron trifluoride gas, cyls., t.l., works lb. .70 - —
cyls., t.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid bbls lb 1.53 —
Bromine, purif. cs. c.l., t.l., dlvd. E of Rockies lb .32 —
cs., l.c.l., same basis . . lb. .34 .39

Bromine, purif., ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms. l.c.l., same basis lb .31 - .34
tanks, same basis lb .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb .48 - —
dms., l.c.l., same basis lb .50 - —
tanks, same basis lb .47 - —
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald lb. 1.95 - —
Bromstyrol, bots lb. 5.25 5.35
Brucine, cns oz Nominal.
Brucine sulfate, NF, cns oz. 1.45 - 1.75
Buchu leaves, bbls. lb. .70 .75

BROWN PIGMENTS
Brown pigment quotations are listed individually. For example, prices on Brown iron oxide, may be found in the I's under Iron oxide brown

Butadiene retd cyls. c.l., refy lb 21 —
cyls., t.c.l., refy lb 22 —
tanks, dlvd lb. .12¾ - —
Butene-1 tanks works lb 0625 —
Butene-2 tanks works lb 0570 —
n-Butyl acetate ferment, dms., c.l., frt. alld lb 17 —
dms., t.c.l., same basis lb 18½ - —
tanks, same basis lb .14½ - —
Syn. dms., c.l., dlvd. E lb .17 —
dms., l.c.l., same basis lb .18½ - —
tanks, same basis lb. .14½ - —

sec-Butyl acetate, syn. dms., c.l., dlvd. E lb .14¾ —
dms., l.c.l., same basis lb 16¼ —
tanks, same basis lb 12¼ —
n-Butyl acrylate, dms. c.l or t.l., straight or mixed frt. alld. E lb. 37½ —
dms., l.t.l., same basis lb. .38½ -
tanks, same basis lb .35 —
n-Butyl alcohol ferment, dms., c.l. frt alld lb 18 —
dms., t.c.l. frt alld lb 19½ —
tanks, frt. alld lb 15½ —
n-Butyl alcohol syn. dms., c.l. dlvd lb 18 —
dms., t.c.l., frt alld lb 19½ —
tanks, dlvd lb 15½ —
Sec-synthetic dms., c.l., dlvd lb 15 —
dms., l.c.l., dlvd lb 16½ —
tanks, dlvd lb 12½ —
n-Butyl alcohol, tert-synthetic dms c.l. frt alld., dlvd E lb 16 —
dms., t.c.l. same basis lb 17½ —
tanks, same basis lb 13½ —
Butyl aldehyde (see Butyraldehyde)
Butyl chloride dms. c.l. works lb .37½ —
dms., l.c.l. works lb .38¼ —
n-Butyl ether dms. c.l., works lb 35¼ —
dms., l.c.l., works lb 36 —
tanks, works lb 33¼ —
Butyl lactate dms c.l. frt alld E. Rockies lb 42½ —
dms., l.c.l. same basis lb 43½ —
tanks, same basis lb 40 —
Butyl laurate, dms. works lb 37½ —

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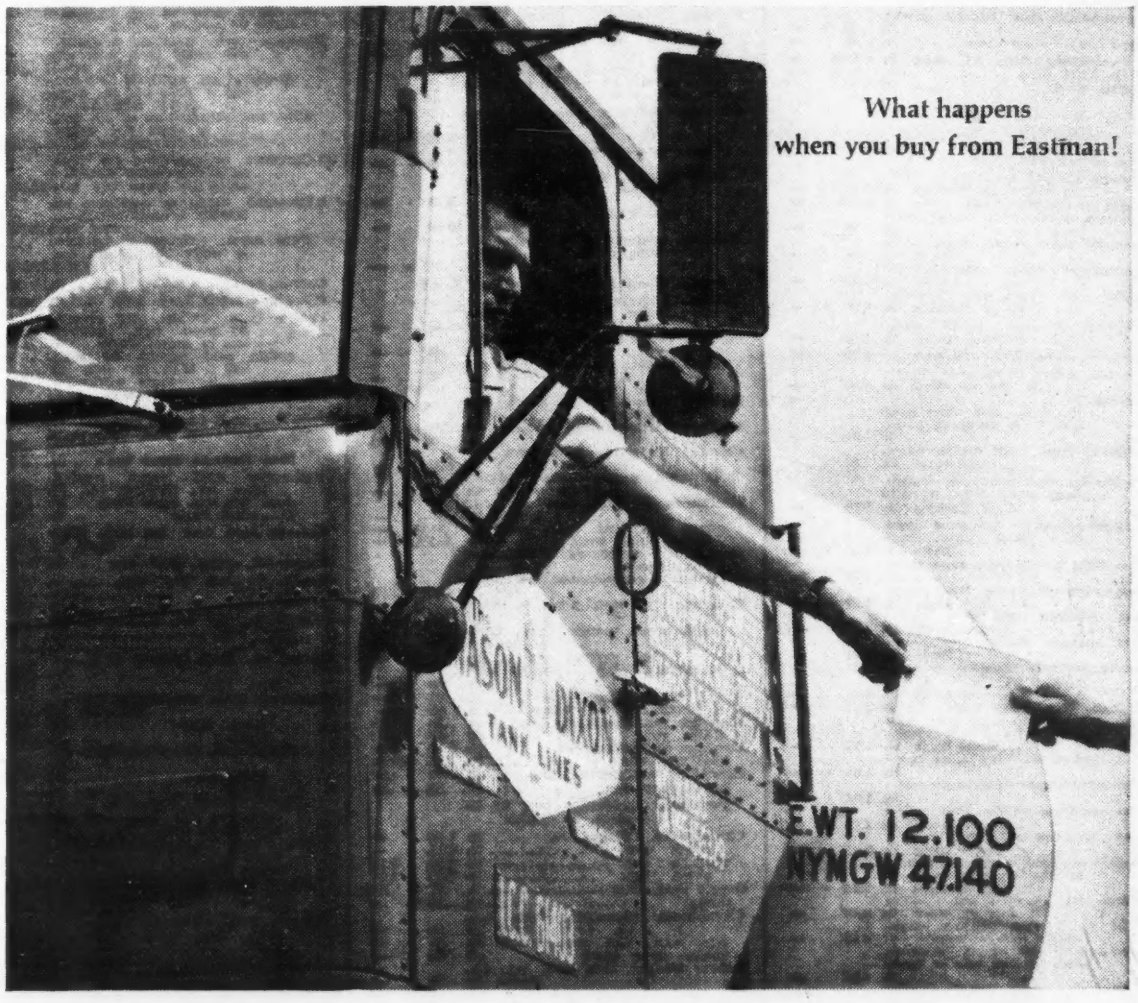
Isobutyl Acetate

For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 363, or **Chemical Week Buyers' Guide**, page 107.



What happens when you buy from Eastman!

Tank truck delivery on Saturday afternoon

"Every now and then we are able to make special service seem real easy," recalls one of our sales coordinators.

"Like the time we filled an order for a tank truck of acetone on Saturday afternoon—and it arrived at the customer's plant before dark.

"I was busy at home (the third inning was just over) when the customer traced me through our plant switchboard operator. He had unexpectedly run out of acetone and was faced with the prospect of shutting down unless he could obtain at least enough to tide him over the weekend.

"I guess it took all of three minutes to complete two phone calls, including one back to the customer to tell him that we could make the shipment, and for him to have a crew stand by about 6:30 P.M. to unload a tank truck.

"Of course, we had a number of things working for us on this one. First, the customer's plant was only four hours away by truck. Second, he was able to catch me at home; and third, the customer had a tank truck order for acetone scheduled for Monday delivery, and this tank truck just happened to be loaded, approved, and at the terminal ready to go."

We were lucky in this instance, but do all we can every time, to assure our customers the best service possible.

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis.
West Coast: Wilson & Geo. Meyer & Company, San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms. l.c.l., works lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms. lb. 4.50 4.60
Butyl phthalate (see Dibutyl phthalate)
Butyl stearate, dms., c.l., frt. alld. E. of Rockies lb. 27¼- —
dms., l.c.l., same basis lb. 28¼- —
Butylamine (see Mono- Di- and Tri-butylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. 47 - —
dms., l.c.l., same basis lb. 47½- —
tc., t.t., same basis lb. 45 - —
Butylated hydroxyanisole, food grade, dms., dlvd lb. 4.75 - —
6-tert-Butyl m cresol (see Mono-tert-butyl m cresol)
Butylated hydroxytoluene (see 2,6-Di-tert butyl p cresol)
1,3 Butylene glycol, dms., c.l., t.l., dlvd lb. 20½- —
dms., l.c.l., t.t., f.o.b. works lb. .22 - —
tanks, dlvd lb. 18 - —
p-tert Butylphenol, bgs., c.l., dlvd., lb. 27½- —
bgs., l.c.l., works lb. 28½- —
Butyraldehyde, dms., c.l., dlvd lb. 22 - —
dms., l.c.l., dlvd lb. 23½- —
tanks, dlvd lb. 19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. 34 - —
dms., l.c.l., same basis lb. 34½- —
tanks, same basis lb. 32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works lb. 40 - —
dms., l.c.l., same basis lb. 43 - —
n-Butyronitrile, dms., c.l., dlvd lb. 56½ - —
dms., l.c.l., dlvd. lb. 57½- —
tanks, dlvd. lb. .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP, red dark shade, bbls., frt. alld. E. of Rockies lb. 5.55 - —
Light shade, bbls., same basis lb. 4.65 - —
medium shade, bbls., same basis lb. 5.30 - —
Medium light shade, bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.30 - —
Yellow all shades, bbls., frt. alld. E. of Rockies lb. 2.95 - —
Cadmium chloride, 400-lb. dms., f.o.b. shipping point lb. 1.49 — —
Cadmium iodide, 25-lb. fib. dms. lb. 6.75 7.00
Cadmium metal, prods. or sticks, ton lots, cs., dlvd lb. 1.60 - —
Cadmium nitrate, paper cyl., lb. dms., less than 5,000 lbs., f.o.b. shipping point, lb. .89 - —
400-lb. dms., 5,000 lbs. or more, same basis lb. .87 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.70 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 2.00 - —
Red, light shade, bbls., same basis lb. 1.77 - —
Red, medium shade, bbls., same basis lb. 1.92 - —
Red, medium light shade, bbls., same basis lb. 1.85 - —
Red, maroon shade, bbls., same basis lb. 2.08 - —
Cadmium-selenide lithopone red, bbls., frt. alld. E. of Rockies lb. 2.81 - —
Orange, bbls., same basis lb. 1.63 - —
Cadmium selenide lithopone red, orange-red shade, bbls., same basis lb. 1.77 - —
Red, dark shade, bbls., same basis lb. 2.61 - —
Red, light shade, bbls., same basis lb. 1.63 - —
Red, medium shade, bbls., same basis lb. 2.28 - —
Red, medium-light shade, bbls., same basis lb. 2.05 —
Cadmium selenide, lithopone, yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.24 - —
Caffeine, NF, cmrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
Caffeine, USP, nat., cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
USP, nat., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld. lb. 2.10 - —
hydrous, powd., 150-lb. dms., frt. alld. lb. 1.96 - —
Cajuput oil, native, cns. lb. 1.75 2.00
Redist., USP, cns. lb. 1.90 2.10
Calamine, USP, dms. lb. .34 -
Calamus oil, bots. lb. 12.00 20.00
Calciferol, cryst., 10 kilo or more lots, works gram .54 —
1-10 kilo lots gram .55 —
Calciferol in edible oil (see Viosterol)
Calcium p-aminosalicylate, trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 —
Calcium bromide, NF, jars, 100 lbs. or more lb. 1.10 - —
Calcium carbide, standard generator size, 600 lb. dms., c.l., dlvd. ton 149.00 —
Calcium carbonate, nat., dry grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 —
Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l., works ton 32.00 34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton 30.00 —
10 to 20 microns, bgs., c.l., works ton 17.00 18.00
Calcium carbonate, precip., dense, bgs., c.l., works ton 30.00 38.50
bgs., l.c.l., works ton 45.00 53.50
medium, bgs., c.l., works ton 38.00 —
bgs., l.c.l., works ton 48.00 53.00
Calcium carbonate, surface treated, bgs., c.l., works ton 42.00 44.00
bgs., l.c.l., works ton 57.00 59.00
ultrafine, bgs., c.l., works ton 117.50 167.50
bgs., l.c.l., works ton 137.50 187.50
Calcium chloride, conc., flake or pellet, 94-97% paper bgs., c.l., works, frt. equald ton 39.30 —
Flake, 77-80% paper bgs., c.l., works, frt. equald ton 32.00 —
Liquor, 40% tanks, frt. equald ton 12.50 —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton 37.00 —
Purif., gran., dms. lb. 27 —
Calcium chloride, solid, 73-75%, dms., c.l., frt. equald ton 30.50 - —
dms., l.c.l., works, frt. equald, ton 36.00 -73.00
USP, gran., dms. lb. .32 - —
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyclamate, 100-lb. dms lb. 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. 73½- —
USP, powd., 100-lb. dm., ton lb. .66½- —
Calcium hydride, lump, dms., works, lb. 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs. 27.50 - —
100-lb. dms., same basis cs. 39.50 - —
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —
Calcium iodide, 25-lb. jars, works lb. 4.27 - —
Calcium lactate, NF, dms., f.o.b. works lb. .43 .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenosulfonate, dms. lb. 1.24 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald, 100 lbs. 16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton. 81.00 - —
bgs., c.l., t.l., f.o.b. Texas City works ton. 75.50 - —
bgs., l.c.l., ton 96.00 - —
Calcium phosphate, dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton. 97.65 - —
bgs., l.c.l., frt. equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., dlvd E. of Rockies lb. .37 - —
Prices W. of Rockies 3c. per lb. more.
Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse, N.Y. lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .45 - —
Calcium silicate, hydrated, bgs., c.l., works lb. 08 - —
bgs., l.c.l., works lb. 08½- —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. 40 .44
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —
Camphene, 46° m.p., dms., incl., c.l., works lb. .15 - —
dms., incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. 12½- —
Camphene, chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs. lb. 3.63 3.70
Camphor, syn., tech., 1 bbl or more, lb. .45 - —
USP, gran., powd., bbls., 1,000-lb. lots lb. .53 - —
bbls., smaller lots lb. .54 - —
tablets, ctns., 1,000-lb. lots, lb. .80 - —
ctns., 500-lb. lots lb. .81 - —
ctns., smaller lots lb. 82 - —
Camphor oil, sassafrassy, dms. lb. .35 .55
White, dms. lb. 26 50
Cananga oil, native, cns. lb. 5.00 6.50
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs. lb. .57 - .58
Refd., pure, bgs. lb. .62 - .63
Powdered Candelilla wax 20 to 100 mesh, 8c higher.
Cantharides, Chinese, cs. lb 1.00 - —
powd., bgs. lb 1.15 - —
Russian, bgs. lb 2.00 2.15
powd., bgs. lb 2.15 2.30
Capric acid, dms. lb. .27¼- .29¾
tanks lb. .24¾- —
Caprolatam, monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., t.t.l., same basis lb. .57 - —
tanks, same basis lb. 49 - —
Caprylic alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., t.t.l., same basis lb. 19½- —
tanks, frt. equald lb. 16½- —
Sec., 92-99% dms., c.l., f.o.b. works lb .22 - —
dms., l.c.l., f.o.b. works lb .23 - —
tanks, f.o.b. works lb 19½- —
Caprylic acid, dms. lb. .27¼- .29¾
tanks lb. .24¾- —
Capsicum (see Pepper red)
Capsicum, oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms. lb 4.00 - —
NF, from African pepper, dms. lb 4.50 - —
Caraway oil, NF, dms. lb. 3.75 - —
Caraway seed, Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .19 - —
Carbazole, 97%, bbls., ton lots, works lb 1.05 - —
Carbon black, channel, rubber heads, bulk, c.l., works lb .08 - —
bgs., c.l., works lb .08½- —
bgs., l.c.l., works lb .16¼- —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .08¾- —
ctns., l.c.l., whse lb. .13½- —
Carbon black, high abrasion, bulk, c.l., works lb. .07¼ - —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd or whse lb. .14½- —
high modulus, bgs., c.l., works, lb. .06¼- —
ctns., l.c.l., whse lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾- —
bgs., ctns., l.c.l., whse lb. 12½- —
Carbon black, pigment, high color, beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd or whse lb .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd or whse lb. 22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E ton. 60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd Metropolitan areas, E ton. 55.00 - —
Solid, bulk, wholesale works ton 85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0520- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., l.c.l., frt. alld. lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., t.t.l., frt. alld lb. .14¼- —
tanks, frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 4.25
dms., smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots. lb. 43.00 -45.00
Cardamom seed, bleached "A", lb. 3.45 - —
Bleached "B" lb. 3.15 - —
Decorticated Alleppey, cs. lb. 2.70 - —
Guatemala, cs. lb. 2.10 - —
Green, Alleppey, bgs. lb. 2.10 - —
Ceylon, bgs. lb. 2.10 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 16.80 — —
bulk, smaller lots, dlvd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots, lb. .70 Nom.
North Country, No. 2, crude, bgs., ton lots lb. .78 - .80
refd., pure, ton lots lb. .85 - .87
North Country, No. 3, Ceara, crude, ton lots lb. .64 - .65
North Country, No. 3, Carnahyba, crude, ton lots lb. .66 - .67
No. 3, refd., pure, bgs., ton lots, lb. .74 - .76
No. 1, Ceara, yellow, bgs., ton lots, lb. .94 - .96
Parnahyba, yellow, bgs., ton lots, lb. .96 - .98
Powdered carnauba wax, 20 to 100 mesh, 8c per lb. higher
Carotene, tech., 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd. gram .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram, dms., dlvd, million units. .144 - —
b-Carotene, in vegetable oil, semi-solid suspension 400,000 A units per gram, cns. kilo. 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns. kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. kilo. 240.00 —
Carvol, bots. lb. 5.00 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible acid-precip., gro., Argentine, bgs., c.l., ex-dock Eastern seaports lb. .16¾- .17¼
Australian, bgs., c.l., same basis lb. .19¼- .19¾
New Zealand, same basis lb. .24 - .25
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J. lb. .24 - —
dms., ton lots, same basis lb. .25 - —
t.w., same basis lb. .22½- —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 1.75
Cassia oil, redist., USP, cns. lb. 7.50 9.00
Cassia, Padang, "A," bls. lb. .31 - —
"B," bls. lb. .30 - —
"C," bls. lb. .29 - —
Korintje "A," bls. lb. .31 - —
"B," bls. lb. .29 - —
"C," bls. lb. .27 - —
Castor oil, dom., blown, dms., c.l., lb. .2550- —
dms., l.c.l. lb. .2650- —
Castor oil, dom., dehydrated, bodied, dms., c.l. lb. .2700- —
dms., l.c.l. lb. .2850- —
tanks lb. .2500- —
dehydrated, unbodied, dms., c.l., lb. .2500- —
dms., l.c.l. lb. .2660- —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2475- —
bgs., ton lots lb. .2875- —
bgs., l.c.l., dlvd lb. .3075- —
dom., raw, No. 1, dms., c.l. lb. .2200- —
dms., l.c.l. lb. .2300- —
tanks lb. .2000- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2225- —
tanks lb. .1925- —
Refd., deod., dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
USP, dms., c.l. lb. .2350- —
dms., l.c.l. lb. .2450- —
tanks lb. .2150- —
Imported, No. 1, Braz., tanks lb. .17½- —
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms., works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .41¼- .43¼
Split, dms. lb. .33¾- .34¾
Castor pomace, bgs., c.l., works ton 35.00 —
Castoreum, nat., cns. lb 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½ —
Resub., dms., works lb 4.29½ —
Catnip leaves, Southern, bls. lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda caustic)
Cedarleaf oil, USP XIII, cns., dms. lb. 3.25 3.50
Cedarwood oil, cns., dms. lb. 1.00 - —
Celery seed, French, bgs. lb. .36 - —
Indian, bgs. lb. .21 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .36 .51
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
27% butyryl content, bgs., dlvd, E lb. .595 .605
38% butyryl content, bgs., dlvd, E lb. .545 .555
38% butyryl content, half-second, bgs., dlvd E lb. .545 .555
50% butyryl content, bgs., dlvd, E lb. .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium hydrate, 74% CeO, fib. dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib. dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. lb. 1.85 1.90
bgs., smaller lots, dlvd. lb. 2.15 —
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E lb. .41¼- —
fib. cns., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .39 - —
Extra, cns., c.l., t.l., dlvd. E lb. .48½- —
fib. cns., l.c.l., same basis lb. .50½- —
tanks, same basis lb. .46 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian, lb. 1.00 - 1.25
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb. 350.00 - —
Charcoal, activated NF, fib dms., c.l., works lb. .34 - —
fib. dms., 5-ton lots, works lb. .35 - .35½
fib. dms., smaller lots, works lb. .36 - .59
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton. 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton. 80.00 - —
5-lb. paper bgs., c.l., same basis ton 106.00 - —
20-lb. paper bgs., c.l., f.o.b. plant, ton. 90.00 - —
40-lb. paper bgs., c.l., same basis ton 86.00 - —
Chenopodium oil, NF, cns. lb. 4.75 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb 1.00 - —
jars, 500-lb. lots lb 1.03 - —
jars, 100-lb. lots or less lb 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 40%, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., 10 dms. or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125 cps., ctns., c.l., works lb. .70 - —
300 cps., ctns., c.l., works lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 5.85
tanks, multiple units, 1 car, same basis⅝ 100 lbs. 6.25 7.25
Chloroacetic acid, mono, flake, 99%, purif., dms., c.l. lb. .23½- .25¼
dms., l.c.l. lb. .24½- —
tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., l.c.l., same basis lb. 1.20 - —
o-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
Chloroform, USP, dms., c.l., dlvd. lb. .27 - —
dms., l.c.l., dlvd. lb. .30 - —
tanks, minimum 4,000 gals., dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .90 - —
Powd., dlvd. E., 100% basis lb. 1.00 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
o-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .20½- —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, comi., cyls., 180 lbs., frt. alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel, dms. ½c per lb. higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., t.t.l., same basis lb. .38 - —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 - —
Choline chloride, 100-lb. dms., frt. equald lb. 1.25 - —
Choline dihydrogen citrate, 100-lb. dms., frt. equald lb. 1.25 - —
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls. dlvd. E. of Rockies, lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
medium blue content, 41-45%, bbls., same basis lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —

BIOCHEMICAL INDIVIDUALITY CAN LEAD TO MULTI-MARKET DEVELOPMENT OF DIGESTIVE AND NUTRITIONAL AIDS

In a book* that deserves wide attention from all concerned with human nutrition, the idea is developed that there is no such thing as a "normal" individual or population. Rather, highly individual needs and biochemical abilities make every person a variant in some respect. This principle of individuality points up both the medical and economic needs for developing specific products for various populations of digestive and nutritional deviates.

Consider this: there is not simply a homogeneous population of poor digesters or poorly nourished persons. There is a particular population of geriatric patients suffering from insufficiencies of both diet and digestive function. There is a particular population of women whose body chemistries must meet the strain of pregnancy. There are separate populations of children, adolescents, and adults whose intake and utilization of food is affected by emotional stress. There are populations of convalescent, alcoholic, and obese patients, of patients with patently clinical GI disturbances, and those who go through life with vague but nevertheless debilitating digestive and nutritional imbalances. Every one of these populations is a market with a specific need for your products.

Specific Enzyme Formulations are Basic to the Development of Products for these Specific Markets

An adequate and balanced supply of digestive enzymes is the sine qua non of good digestion—and upon good digestion depend proper nutrition and the total biochemical and physiological well-being of the body. The quantitative and qualitative needs for food-hydrolyzing enzymes are as highly individual in particular populations as are those for vitamins, minerals, and amino acids. Amylases, proteases, cellulases, and other nutrient-releasing enzymes should be your first tool in building specificity into your formulations.

Wallerstein Enzymes are Particularly Suited to Matching the Specific Needs of Your Target Populations

Why? Wallerstein enzymes are potent. Mylase® 100 is ten times more active than any other commercial amylase. Prolase® 300 is 2.5 to 30 times—depending on the test method used—stronger than pancreatin in protein-hydrolyzing power. Cellase™ 1000 has at least twice the strength of any other proprietary cellulase. Wallerstein enzymes are standardized. Every one is assayed in terms of well defined units by rigorous, rapid, and realistic tests. (These assays have been instrumental in dispelling the "folklore and witchcraft" that formerly hindered the use of digestive enzymes.) Wallerstein enzymes are pharmaceutically attractive. Their minimal color and odor, high purity and consequent low bulk, make possible elegant packages heretofore impossible. Wallerstein enzymes are backed by meaningful technical assistance. All this adds up to specific formulations for your particular markets.

For a record of what Wallerstein enzymes have done for others—and for an indication of what they can do for you—contact Gerry Gray.

WALLERSTEIN COMPANY
Division of Baxter Laboratories, Inc.
Staten Island 3, N.Y.
Gibraltar 2-6400

Wallerstein Manufactures Enzymes, Antibiotics and Chemicals for Industry

*Roger J. Williams: Biochemical Individuality, New York, Wiley, 1956.

Chrome green, reduced color 25%, bbls., same basis lb. .30 - —
Chrome green prices 1c. higher W of Rockies.
Chrome orange, CP, bbls., dlvd. E. of Rockies lb. .35 - —
Chrome orange prices 1c. higher W of Rockies.
Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .33 - —
Chrome yellow price 1c. higher W of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald. lb. .29½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works, lb. .10 - —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld. lb. 1.20 - —
Pure, bgs., c.l., frt. alld. lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide, NF, bots. lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb. .23 - —
NF, yellow, broken, bgs lb. .35 - .40
Cinnamic acid, refd., bots. lb. 2.50 3.50
Cinnamic alcohol, bots. lb. 1.50 - 1.60
Cinnamic aldehyde, dms. lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs. lb. .53 - —
Ceylon, No. "0000," bgs. lb. .73 - —
Cinnamon bark oil, bots. lb. 42.00 -48.00
Cinnamon leaf oil, crude, dms. lb. 1.60 - 2.00
USP. (Cassia), cns., dms. lb. 8.50 -13.50
Citral, CP, bots. lb. 4.50 - 5.00
Extra, bots. lb. 3.60 - 5.00
Syn., dms. lb. 7.25 - 7.40
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l. lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l. lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 .28½
bgs., dms., smaller lots lb. .29 .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms. lb. 1.00 —
Java-type, dms. lb. 1.20 - 1.35
Citronellal, bots., dms. lb. 1.40 - 1.60
Citronellol, bots., dms. lb. 1.90 2.50
Citronellol, synthetic, dms. lb. 1.70 —
Civet, artif., bots. lb. 13.75 -15.00
Nat., bots. oz. 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton. 17.50 -21.50
crushed shed moisture, bulk, c.l., Tenn ton. 8.00 -11.25
imp., airfloated, bgs., c.l., Atl. port net-ton. 43.00 -47.00
lump, bulk, Atl. port net-ton. 31.50 -37.50
Clay, China, dom., dry-grd., air floated, 99%, 325 mesh, Georgia, bgs., c.l., works ton. 11.00 -17.00
Georgia, bgs., l.c.l., works ton. 13.50 -22.50
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me. long-ton. 23.00 -35.00
white, powd., bgs., c.l., ex dock net-ton. 50.00 —
bgs., l.c.l., ex whse net-ton. 60.00 -70.00
Cleaners naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York gal. 18 —
Group 3 gal. .12875- —
Houston, Texas gal. .145 —
140°F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1.8, tech., solid, dms. frt. alld lb. .77 - —
1.7, tech., dms. frt alld lb 2.20 - —
Clove bud oil, USP, dms. lb. 2.65 - —
Cloves, Madagascar, bgs. lb. .35 - —
Zanzibar, bgs. lb. .37 - —
Clove leaf oil, crude, dms. lb. 1.10 - —
CMC, crude, 96.4% low or medium vis, bgs., 23,000 lbs., dvld. E., 100% basis lb. .40 - —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 - .50
65%, low or medium vis., bgs., c.l., dlvd. E., 100% basis lb. .40 - —
l.c.l., dlvd. E., 100% basis lb. .42 - 1.00
purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
CMC, standard, low or medium vis., bgs., smaller lots, same basis lb. .59 - 1.00
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for asphalt, tanks, works gal. .19 - —
Refd., resale, indust., dms., c.l., ex whse gal. .33 - —
dms., l.c.l., ex whse gal. .39 - —
tanks works gal. .20½- —
Coaltar pitch, aluminum, bulk, Works ton. 42.00 - —
Carbon, bulk, works ton. 42.00 - —
Indust., bulk, works ton. 44.00 - —
Core bulk works ton. 40.50 - —
Fiber, bulk works ton. 48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1 tanks, works ton. 41.00 - —
Cobalt acetate 23.4% Co. dms., dlvd lb 1.04 - —
Cobalt blue, genuine, 250 lb bbls., dlvd E of Rockies lb. 4.90 - —
Cobalt blue prices 1c higher W of Rockies
Cobalt blue imitation (see Ultramarine blue)
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .57½- —
Cobalt metal, 99% dms. f.o.b. carrier lb. 1.50 —
Cobalt naphthenate liq. 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate 20.1% Co. bbls. dlvd. lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R. lb 1.15 - —
70-71% Co. kgs. same basis lb 1.12 —
Cobalt oxide prices W of Mississippi R. 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb. 1.35 —
Cobalt resinate, fused 3% Co. dms lb. .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb .64 —
Monohydrated, 33% Co. dms., dlvd lb 1.09 - —
Cobalt tallate 6% Co., dms. dlvd lb .44 - —
Cocaine, USP cns., 100-oz lots, f.o.b works oz. 17.50 - —
Cocaine hydrochloride, cns 100-oz lots f.o.b works oz. 13.75 - —
Cocillana bark bls lb 18 .20
Cocoa butter, bgs. lb. .52 - .57
Coconut oil, crude, tanks, New York lb. .13¼- —
tanks, Pac. coast lb. .11¾- —
Refd., deodorized, dms. lb. .19 - .20
Coconut oil acids, dist., dms lb. .21½- .24
tanks lb. .19 - —
double dist. (stripped), dms. lb. .22½- .25
tanks lb. .20 - —
Cod oil, dms. spot lb 08¾- .08¼
Codeine, NF cns. 100-oz lots oz. 13.25 —
Codeine hydrochloride cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate USP cns. 100-oz lots oz. 10.25 - —
Codeine sulfate USP cns. 100-oz lots oz. 10.75 - —
Codliver oil, USP dms gal 1.40 1.70
Cohosh root, black bls lb 20 25
Blue bls lb 20 25
Colchicine, USP, bots. 27.50 -29.00
Colchicum root bls lb 35 45
Colchicum seed, bgs. lb. .85 - .90
Collodion, USP, dms. lb. .32½- —
USP flexible dms lb .34 —
Colocynth pulp bls lb 75 —
Colombo root bls lb .16 .18
Condurango bark bls lb 18 20
Congo copal gum, No 1, bgs lb. .26 - .27
No 2, bgs lb .23 .25
No 3, bgs lb. .21 - .24
Copaiba balsam, cns., dms. lb. .80 - .90
Copaiba oil cns lb 1.35 2.00
Copper acetate bbls, c.l., works lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, dark dense, works lb. 34.35 - —
bgs., l.c.l., works lb. 35.85 - —
Copper chloride, cupric, anhyd., dms., works lb. .43½- .44
cryst., dihydrate, dms., works lb. .29¾ .30½
cryst., dried, dms., works lb. .37¾- .38½
Copper chloride, cuprous, dms., works lb. .38 55- .4155
Copper cyanide, tech., dms. 20,000-lb lots or more lb. .609 —
dms., 1,000-lb lots or more lb. .619 —
dms., smaller lots lb. .639 .65
Copper gluconate dms lb. 3.20 —
Copper hydrate dry, dms, c.l., frt. E. of Miss lb. .52½- —
dms., l.c.l., same basis lb. .53 - —
Copper metal electrolytic, dlvd. Valley, basis lb. .29 - —
Copper naphthenate liq., 8% Cu, dms. frt alld lb. .26½- —
Copper nitrate tech. cryst. dms., works lb. .30¾ .33¼
Copper oleate, solid, 8% Cu dms., works lb. .45 —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .46 - —
Copper oxide, red, 97%, USN Type I, bbls. 100-5,000-lb lots, lb. .46½- —
90%, USN Type II, bbls., 100-5,000-lb lots or more, works lb. .45½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate dms lb 1.14 1.18
Copper resinate, precip., dms, frt. alld lb. .47 - —
Copper sulfate, CP, gran., dms., works lb. .18 85- —
Cryst., 99%, bgs., c.l., works, 100 lbs. 12.00 - —
bgs., l.c.l., works 100 lbs. 12.50 -15.00
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs. 22.65 - —
dms., l.c.l., works 100 lbs. 23.40 - —
Tribasic, distributors, bgs., c.l., works 100 lbs. 29.10 - —
bgs., l.c.l., works 100 lbs. 30.60 - —
Copper undecylenate dms lb 2.75 —
Copra, Atl., Gulf ports, c.i.f. ton. 160.00 - —
Pac. ports, c.i.f. ton. 155.00 - —
Coriander oil, USP, bots. lb. 6.50 - 7.25
Coriander seed, Moroccan, bgs lb. .18 - —
Rumanian, bgs. lb. .14 - —
Yugoslavian bgs lb .08½- —
Corn oil, crude, tanks, works lb. .17 - —
Foots, (soapstock acid oil), tanks, New York lb. .05½ Nom.
Refd. salad, dms. lb. .2272- .23
tanks lb. .2072- —
Corn oil acids, dist., dms lb. .15½- .18
tanks lb. .13 - —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs min 100 lbs. 7.30 - —
paper bgs., l.c.l. 100 lbs. 7.45 - —

TENNESSEE CORPORATION

We mine Copper, Sulfur, Iron and Zinc and are basic producers of their chemical derivatives. Our basic position in these elements is your assurance of exacting quality control from raw materials to finished product.

COPPER
SULFUR
IRON
ZINC
MANGANESE
FLUORINE

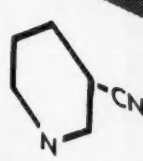
Copper Carbonate
Copper Sulfate
Copper Sulfate, Monohydrated
Chlorosulfonic Acid
Para Toluene Sulfonic Acid, Anhydrous
Sodium Hydrosulfite
Sulfonates
Sulfonic Acids
Sulfur Dioxide
Sulfuric Acid
Ferric Iron Sulfate
Zinc Oxide
Zinc Sulfate, Monohydrated
Manganese Sulfate
Manganous Oxide
Potassium Silicofluoride
Sodium Silicofluoride

TENNESSEE CORPORATION
612-629 Grant Building, Atlanta 3, Georgia

REILLY NIACIN

U. S. P. Grade

TECHNICAL Grades



3-Cyanopyridine

Methyl Nicotinate

...Produced from Reilly's synthetic 3-Picoline, thus insuring continuity of supply

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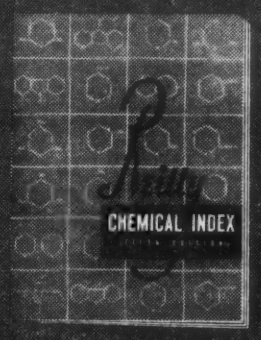


Reilly CHEMICALS

REILLY TAR & CHEMICAL CORPORATION

MERCHANTS BANK BUILDING INDIANAPOLIS 4, INDIANA

Sales Offices in Principal Cities

Corn Syrup—Denatured Alcohol

Corn syrup, 43° Be., tanks, dlvd, N Y 100 lbs. 6.30 - —
non-ret dms. c.l., same basis. 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate USP bots., kilo or more gram. .95 - 1.75
Costus oil bots oz 6.00 —
Cottonseed meal 41% bgs., Mem phis ton.56.00 -57.00
Cottonseed oil, crude, tanks, South, East lb. .12¾- .12⅞
tanks, Valley lb. .12⅝- —
tanks, Texas, Lubbock lb. .12½- —
tanks, Texas, Waco lb. .12¾- —
Foots (soapstock, acid 95%), New York, tanks lb. .03½- —
Refd., salad, dms. lb. .18⅜- .18¾
tanks, salad, dms. lb. .16⅜- —
Cottonseed oil acids, dist., dms lb. .15½- .18
tanks lb. .13 - —
Coumarin, NF, cryst., dms lb. 3.30 - 3.40
Cramp bark, NF, bls. lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate NF bots. chys., lb 3.05 3.26
Creosote coaltar, crude, tanks, works, frt adjusted gal. .24 - —
Crude soln 80% tanks works gal 226 - —
Refd. dms., c.l., works gal. 50 - —
dms., l.c.l. same basis gal 62 - —
tanks same basis gal 38 —
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 20c per gallon for coaltar.

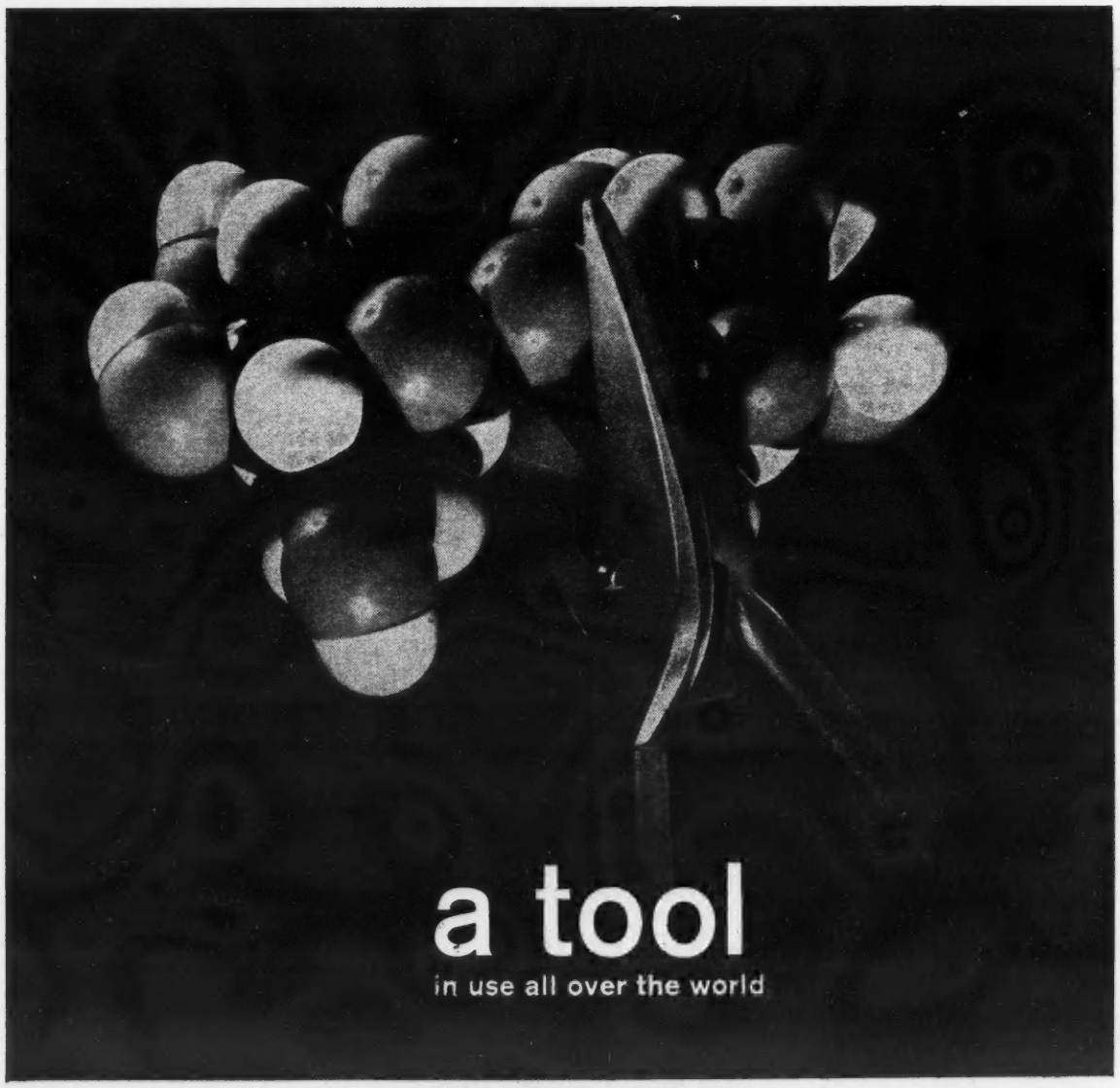
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF chys., dms., same basis lb. 1.43 1.47
Pinewood dms. incl. c.l., works. lb. .0611- —
dms. incl., l.c.l., works lb. .0684- —
dms. incl., l.c.l. ex whse, New York lb. .0795- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech. 50% below 204°C., dry above 207°C., wide distillation range non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range non-ret dms., c.l., same basis lb. .18 - —
non-ret dms. l.c.l., same basis. lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms., c.l., works, lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2,97% 2°C. dms. c.l. frt. equald. lb. .22 - —
dms., l.c.l. same basis lb. .23 - —
tanks, same basis lb. .20 - —

o-Cresol, 30.5°C. m.p and over, ret., dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
Cresol, 29°-29.9°C. m.p., dms., c.l., frt equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C. m.p., dms. c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd lb. .53 - —
tanks, dlvd lb. .49 - —
2,3-Cresotic acid dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms. or more, gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —

Crotonaldehyde, 91-93%, dms., l.c.l, works lb. .38 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
bgs., l.c.l., works 100 lbs.14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 - —
bgs. t.t.l., works lb .22 - —
Cubeb berries, NF, bgs. lb. 1.30 - —
Powd., cs. lb. 1.45 - —
Cubeb oil, cns lb. 8.75 - 9.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs. lb. .19 - —
Moroccan, bgs. lb. .36 - —
Turkish, bgs. lb. .18 - —
Cumin seed oil, bots., cns lb.15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract, ton.57.00 - —
Fertilizer, pulv., 21% N, bgs., works unit-ton 2.85 - —
Cyanamide, fertilizer, indust. grade bgs, c.l., works ton.75.00 - —
bgs., l.c.l., works ton.96.00 - —
Indust. grade 6-16 mesh, dms., c.l., works ton.120.00 - —
dms., l.c.l., works ton.140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal 1.02 - —
dms. l.c.l. same basis gal. 1.10 - —
dms., c.l., dlvd W of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
98% tech. 40-dm. lots or more, f.o.b works gal. .56 - —
5-39 dms. same basis gal. .60 - —
tanks, same basis gal. .36 - —
Cyclohexanol, tech., dms., c.l., works, frt alld. E lb. .28½- —
dms., l.c.l. works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l. works lb. .34½- —
tanks, works lb .31 - —
Cyclohexylamine, tech., dms., c.l., works lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cypress oil, bots. lb. 5.30

D

2,4-D, tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs. dms. l.c.l., same basis lb. .45 .49
2,4-D butyl ester dms. c.l. works. lb. .43 —
dms., l.c.l., same basis lb .48 .53
tanks, same basis lb. .42 —
2,4-D isopropyl ester, dms., c.l., works lb. .43 —
dms., l.c.l., works lb. .48 .53
tanks, works lb. .42 —
Dammar gum Batavia, A E. cs lb No stocks.
East India, Batu, bold, bgs lb. .15½ .18
nubs and chips, bgs lb. .10 .11
black, bold, bgs lb. .16 - .18
nubs and chips, bgs. lb. .13 - .14⅛
unscraped, bgs. lb .13 .14⅛
pale, chips, bgs lb .16 - .18
pale, nubs, bgs. lb 20¾ .24
Siam, cs. lb .31½ .34
Singapore, No. 1, bgs. lb. .38 - .44
No 2, bgs. lb. .29 .32
dust, bgs. lb. .18 20
No 3, bgs. lb. No stocks.
Dandelion root, bls lb. .35 40
DDD, tech., flake, grd., fib dms., c.l., works lb. .45 .47
fib. dms., l.c.l., works lb. .46 .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots, same basis. lb. .25 - —
fib. dms., c.l., same basis lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
i-Decanol, tech., dms., c.l., dlvd E. lb. .43½- —
dms., l.c.l., dlvd. E. lb. .45½- —
tanks, dlvd. E lb. .41 - —
Decyl alcohol, mixed (somers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd. lb. .25 - —
tanks, dlvd. lb .21 - —
Perfume grade, bots. lb 1.00 2.00
Decyl alcohol, normal (see i-Decanol)
Deertongue leaves, bls. lb. .50 - .60
Defluorinated phosphate, feed grade, 14% P paper bgs., c.l., t.l., Tupelo, Miss ton.52.00 - —
18% P, paper bgs., c.l., Texas City ton.61.25 - —
paper bags, c.l., works, Miss ton.66.00 - —
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton.66.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 - .14
Neutral (over 2% free fatty acid), 400-lb dms lb. 13 - —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E of Rockies. gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80⅛
tanks, dlvd., same basis gal. .53⅛ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E of Rockies gal. .73 —
dms., l.c.l., same basis gal. .77 .83
tanks, same basis gal. .56 —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E of Rockies gal. .70½- —
dms., l.c.l. same basis gal. .75½- .81⅛
Denatured alcohol, ethyl, SD1, tanks, same basis gal. .54½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .69 —
dms., l.c.l., same basis gal. .74 - .80
tanks, same basis gal. .53 —
SD3A, dms., c.l., dlvd E. of Rockies gal. .68 —
dms., l.c.l. same basis gal. .73 .79
tanks, same basis gal. .53 —
Denatured alcohol, ethyl, SD23A, dms., c.l. dlvd. E of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81⅛
tanks, same basis gal. .54½- —
Denatured alcohol, ethyl, SD23H, dms., c.l., dlvd. E of Rockies gal. .71 —
dms., l.c.l., same basis gal. .76 - .83
tanks, same basis gal. .55 —
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80⅛
tanks, same basis gal. .53½- —
SD30, dms., c.l. dlvd. E. of Rockies gal. .68 —
dms., l.c.l., same basis gal. 73 - .79
tanks, same basis gal. .53 —



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Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies	gal.	.71	—
dms., t.c.l., same basis	gal.	.76	.83
tanks, same basis	gal.	.55	—
Denatured alcohol, ethyl, SD-40, dms., dlvd. E. of Rockies	gal.	.70½	—
dms., t.c.l., same basis	gal.	.75½	.81½
tanks, same basis	gal.	.54½	—

For anhyd. alcohol on above formulas prices are 7c. per gal. higher.

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, dms	lb.	15.00	-17.00
dl-Desoxyephedrine hydrochloride, dms	lb.	6.50	—
Dextrin, corn, gum, paper bgs., c.l.,	100 lbs.	9.39	—
paper bgs., l.c.l.	100 lbs.	9.54	—
canary dark, paper bgs., c.l.	100 lbs.	9.23	—
paper bgs., l.c.l.	100 lbs.	9.38	—
indust. grade, 6-16 mesh, canary light, paper bgs., c.l.	100 lbs.	9.13	—
paper bgs., l.c.l.	100 lbs.	9.28	—
white paper bgs., c.l.	100 lbs.	8.97	—
paper bgs., l.c.l.	100 lbs.	9.12	—

Corn dextrin in cotton bgs. 15c per 100 lbs higher

Dextrose anhyd., comi., bgs., c.l.	100 lbs.	8.65	—
bgs. t.c.l.	100 lbs.	8.80	—
Anhyd., special, aluminum foil lined fib. dms., 200-lb.	dms	14.70	—
100-lb. dms.	100 lbs.	15.20	—
Hydrated, comi., bgs., c.l., ex whse	100 lbs.	7.45	—
bgs. c.l., ex whse	100 lbs.	7.60	—
USP dms.	lb.	.19¾	—
Diacetone alcohol, acetone-free, dms., c.l., dlvd	lb.	.15½	—
dms., t.c.l., dlvd.	lb.	.17	—
tanks, dlvd.	lb.	.13	—
Tech., dms., c.l., dlvd.	lb.	.15	—
dms., t.c.l., dlvd.	lb.	.16½	—
tanks, dlvd	lb.	.12½	—
Diacetyl, flavor grade, bots	lb.	3.30	4.30
Di-sec-amyl phenol, dms., c.l., works	lb.	.32	—
dms., t.c.l., works	lb.	.33	—
tanks, works	lb.	.29½	—
Di-tert-amyl phenol, dms., c.l., works	lb.	.32	—
dms., t.c.l., works	lb.	.33	—
tanks, works	lb.	.29½	—
Diallylamine, dms., c.l., dlvd.	lb.	.98½	—
dms., t.c.l., dlvd.	lb.	1.00	—
tanks, dlvd.	lb.	.96	—
o-Dianisidine, dry, tech., fib. dms.	lb.	2.00	—
Dibenzyl sebacate, dms., c.l., works.	lb.	.93	—
dms., t.c.l., same basis	lb.	.94	—
tanks, same basis	lb.	.91	—
Dibromobenzene, bgs., 500-lb. lots.	lb.	.55	—
2,6-Di-tert-butyl-p-cresol, teed grade, c.l., t.l., dms., dlvd.	lb.	.65	—
t.t.l., dms., same basis	lb.	.68	—
Food grade, c.l., t.l., dms., dlvd.	lb.	.65	—
dms., t.t.l., same basis	lb.	.68	1.10
Tech., Jms., c.l., t.l., dlvd.	lb.	.57	—
dms., t.c.l., same basis	lb.	.60	—
tanks, same basis	lb.	.54	—
Dibutyl fumarate, dms., c.l., t.l., dlvd. E	lb.	.31½	—
dms., t.c.l., t.t.l., dlvd. E	lb.	.33	—
tanks, dlvd E	lb.	.29	—
Dibutyl maleate, dms., c.l., t.l., dlvd. E	lb.	.31½	—
dms., t.c.l., t.t.l., dlvd. E	lb.	.33	—
tanks, dlvd. E	lb.	.29	—
Dibutyl phthalate, dms., c.l., dlvd. E	lb.	.31½	—
dms., t.c.l., same basis	lb.	.33	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.29	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.29	—
Dibutyl sebacate, dms., c.l., works.	lb.	.67½	—
dms., t.c.l., works	lb.	.68½	—
tanks, works	lb.	.65½	—
Dibutyl tartrate, dms., works, frt. alld	lb.	.65½	—
Dibutylamine, dms., c.l., dlvd	lb.	.55½	—
dms., t.c.l., same basis	lb.	.57	—
tanks, same basis	lb.	.53	—
Dicapryl phthalate, dms., c.l., dlvd.	lb.	.28½	—
dms., t.c.l., dlvd.	lb.	.30	—
tanks, dlvd.	lb.	.26	—
Dicapryl sebacate, dms., c.l., works.	lb.	.63	—
dms., t.c.l., works	lb.	.63½	.64
tanks, works	lb.	.61	—
2,5-Dichloroaniline, dms., works	lb.	.83	—
3,4-Dichloroaniline, tech., solid, tanks, frt. alld	lb.	.73	—
o-Dichlorobenzene, dms., c.l., frt. alld. E	lb.	.12¾	—
dms., t.c.l., same basis	lb.	.13¾	—
tanks, same basis	lb.	.11	—
p-Dichlorobenzene, dms., c.l., f.o.b. works, frt. alld. E	lb.	.12	—
dms. 2,000 lbs. or more same basis	lb.	.14½	—
1,4-Dichlorobutane, dms., c.l., or t.l., works	lb.	.33½	—
dms., t.c.l., or t.t.l., works	lb.	.34	—
tanks, works	lb.	.32	—
Dichlorodiphenyltrichloroethane (see DDT).			
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E	lb.	.15½	—
dms., t.c.l., t.t.l., same basis	lb.	.17	—
tanks, same basis	lb.	.13	—
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald	lb.	.65	—
dms., t.c.l., same basis	lb.	.75	—
Dichloropentanes dist., dms., c.l., works	lb.	.05	—
dms., t.c.l., works	lb.	.06	—
tanks works	lb.	.03	—
Dichlorophenoxyacetic acid (see 2,4-D).			
Dicyclohexylamine dms. c.l., works.	lb.	.54	—
dms., t.c.l., works	lb.	.55	—
tanks, works	lb.	.52	—
Dicyclohexyl phthalate, gran., fib. dms. c.l. works frt. alld.	lb.	.47½	—
fib. dms., t.c.l., same basis	lb.	.49	—
Dicyclopentadiene, dms., c.l., f.o.b. works	lb.	.14½	—
dms., t.c.l., same basis	lb.	.14¾	—
tanks, same basis	lb.	.12	—
Didecyl phthalate, dms., c.l., works.	lb.	.28½	—
dms., t.c.l., same basis	lb.	.30	—
tankcars, tanktrucks, 2,000 gals.	lb.	.26	—
tanktrucks, 1,000-1,999 gals, same basis	lb.	.26½	—
Dieldrin, dms., c.l., dlvd.	lb.	1.85	—
dms., t.c.l. dlvd.	lb.	1.90	—
Diethanolamine dms., c.l., dlvd E.	lb.	.27	—
dms., t.c.l., same basis	lb.	.28½	—
tanks, same basis	lb.	.24½	—
Diethanolamine lauryl sulfate, dms., c.l., frt. alld	lb.	.27½	—
dms., t.t.l. frt. alld.	lb.	.28½	—
tanks, frt alld	lb.	.26½	—
Diethyl barbituric acid (see Barbital).			
Diethyl carbonate, dms., c.l., f.o.b. works	lb.	.47¼	—
dms., t.c.l., same basis	lb.	.48½	—
tanks, same basis	lb.	.45	—
Diethyl ethanolamines, dms., c.l., dlvd	lb.	.69½	—
dms., t.c.l., dlvd.	lb.	.71	—
tanks, dlvd.	lb.	.67	—
Diethyl oxalate, dms., c.l., f.o.b. works	lb.	.42½	—
dms., t.c.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.40	—
Diethyl phthalate, dms., c.l., dlvd.	lb.	.29¾	—
dms., t.c.l., dlvd.	lb.	.31¼	—
tanktrucks, 1,000-1,999 gals, same basis	lb.	.27¾	—
tankcars, tanktrucks, 2,000-lb lots, same basis	lb.	.27¼	—
Diethyl sulfate, dms, c.l., frt. alld. E	lb.	.21	—
dms., t.c.l., frt. alld. E	lb.	.22½	—
tanks, frt. alld. E	lb.	.18½	—
Diethyl thiourea, dms., c.l., t.l., works	lb.	.58	—
dms., t.c.l., same basis	lb.	.59	—
Diethyl toluamide, 90-95% meta isomer dms. c.l. t.l., works.	lb	2.30	—
5-44 dm. lots, works	lb	2.35	—
1-4 dm. lots, works	lb	2.40	—
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld	lb.	.83	—
Diethylamine, dms., c.l., dlvd E	lb.	.52	—
dms., t.c.l., same basis	lb.	.53½	—
tanks, same basis	lb.	.49½	—
N,N-Diethylaniline dms., c.l., frt. alld	lb.	.57	—
dms., t.c.l., same basis	lb.	.58	—
tanks, same basis	lb.	.55	—
Diethylbenzene, 380 lb. dms., c.l., t.l., frt. alld., Zone 1	lb.	.17½	—
f.o.b., Zone 2	lb.	.18½	—
Diethylbenzene, 380-lb. dms., t.c.l., c.l., f.o.b. Zone 1	lb.	.19½	—
f.o.b. warehouse points, Zone 2	lb.	.20½	—
Diethylbenzene tankcars, Zone 1	lb.	.15	—
Zone 2	lb.	.16	—
Zone 1 is East of the Rockies. Zone 2, West of the Rockies			
Di-2-ethylhexyl adipate (see Di-octyl adipate).			
Di-2-ethylhexyl phthalate (see Di-octyl phthalate).			
Diethylene glycol dms. c.l., dlvd E.	lb.	.17¾	—
dms., t.c.l., same basis	lb.	.19¼	—
tanks, same basis	lb.	.15¼	—
Diethylene glycol diethyl ether, dms., c.l., works	lb.	.55	—
dms., t.c.l., works	lb.	.55¾	—
Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E	lb.	.30¾	—
dms., t.c.l., frt. alld. E	lb.	.32¼	—
tanks, frt. alld. E	lb.	.28¼	—
Diethylene glycol monobutyl ether acetate, dms., c.l., works	lb.	.30¾	—
dms., t.c.l., works	lb.	.31½	—
tanks, works	lb.	.28¾	—
Diethylene glycol monoethyl ether, dms., c.l., dlvd. E	lb.	.22½	—
dms., t.c.l., dlvd. E	lb.	.24	—
tanks dlvd E	lb.	.20	—
Diethylene glycol monoethyl ether acetate, dms., c.l., works.	lb.	.27¼	—
dms., t.c.l., works	lb.	.28	—
tanks, works	lb.	.25¼	—
Diethylene glycol monomethyl ether, dms., c.l., dlvd. E	lb.	.21	—
dms., t.c.l., dlvd. E	lb.	.22½	—
tanks, dlvd E.	lb.	.18½	—
Diethylenetriamine, dms., c.l., dlvd. E	lb.	.44	—
dms., t.c.l., dlvd E.	lb.	.45½	—
tanks, dlvd E.	lb.	.41½	—
Diethylstilbesterol USP, bots. 10-kilo lots	kilo	100.00	147.50
bots. 1-kilo lot	kilo	110.00	152.50
Digitalis leaves USP, dom. dms	lb	1.25	—
Digitoxin, USP, bots	gram	3.75	4.20
Diglycol laurate dms., ton lots	lb.	.32½	—
Diglycol stearate, dms., t.l.	lb.	.26	—
Diglycolic acid bgs. c.l. t.l. works.	lb	15½	—
bgs. t.c.l. works	lb.	.16	—
Dihexyl sebacate dms., c.l., works.	lb	66	—
dms., t.c.l., works	lb	67	—
tanks works	lb	64	—
Dihydrazine sulfate, dms., works	lb	1.10	1.25
Dihydrostreptomycin sulfate bulk.	gram	.03	—
1,2-Dihydroxy anthraquinone, dms., works	lb	3.45	—
2,2-Dihydroxy-5-5-dichloro-diphenyl methane, pure, dms	lb	2.55	—
Tech., dms., 20,000 lbs or more	lb	1.11	—
dms. 1,050 lbs to 20,000 lbs.	lb	1.13	—
dms. 150 lbs to 1,050 lbs	lb	1.15	—
Di-isobutyl ketone, dms., c.l., dlvd.	lb.	.17	—
dms., t.c.l., dlvd.	lb.	.18½	—
tanks, dlvd	lb.	.14½	—

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Di-Isobutyl Phthalate—Dyes

Di-isobutyl phthalate, dms., c.l., dlvd. E	lb.	.31½-	—
dms., t.c.l., same basis	lb.	.32½-	—
tanks, same basis	lb.	.29 -	—
Di-isobutylene dms. c.l., dlvd. E	lb.	.10 -	—
dms. t.c.l., dlvd. E	lb.	.11½-	—
tanks dlvd E	lb.	.08 -	—
Di-iso-octyl phthalate, dms., c.l., works	lb.	.29 -	—
dms., t.c.l., same basis	lb.	.30½-	—
tanktrucks, 1,000-1,999 gals., works	lb.	.27 -	—
tankcars, tanktrucks, 2,000 gals., works	lb.	.26½-	—
Di-iso-octyl sebacate, dms., c.l., works	lb.	.62 -	—
dms., t.c.l., works	lb.	.61¼-	—
tanks, works	lb.	.60 -	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¼-	—
dms., t.c.l., same basis	lb.	.24¾-	—
tanks, same basis	lb.	.20¾-	—
Di-isopropylamine dms., c.l., dlvd. E of Rockies	lb.	.50½-	—
dms., t.c.l., same basis	lb.	.52 -	—
tanks, same basis	lb.	.48 -	—
Dillweed oil, dom., bots., dms	lb.	5.25 -	—
Dimethyl anthranilate, cns.	lb	4.15 -	—
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd	lb	3.50 -	—
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E	lb.	.78 -	—
dms., l.c.l., dlvd. E	lb.	.79½-	—
tanks, dlvd. E	lb.	.75½-	—
Dimethyl ethanolamine, 70%, dms., c.l., dlvd., 100% basis, contained amines	lb.	.78 -	—
dms., t.c.l., dlvd., 100% basis	lb.	.79½-	—
tanks, dlvd., 100% basis	lb.	.75½-	—
Dimethyl hydroquinone, dms.	lb.	1.90	2.20
Dimethyl phthalate, dms., c.l., works	lb.	.29¾-	—
dms., t.c.l., works	lb.	.31¼-	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.27¾-	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.27¼-	—
Dimethyl sebacate, dms., c.l., works.	lb.	1.31 -	—
dms., t.c.l., works	lb.	1.30 -	—
tanks, works	lb.	1.28 -	—
Dimethyl sulfate, ret. dms., c.l., works	lb.	.17½-	—
ret. dms., t.c.l., works	lb.	.18½-	—
tanks, works	lb.	.16½-	—
Dimethyl sulfide, dms., c.l., works.	lb.	.17½-	—
Refd. 63°C. dms	lb.	.18½-	.19½
tanks, works	lb.	.15 -	—
Dimethyl sulfoxide, dms., c.l., f.o.b. works	lb.	.35 -	—
dms., t.c.l., same basis	lb.	.37 -	.38
tanks, same basis	lb.	.33 -	—
Dimethylamine, 25% soln., dms., c.l., frt. equald. 100% basis	lb.	.38 -	—
dms., t.c.l., frt. equald. 100% basis	lb.	.38½-	—
tanks, frt. equald, 100% basis.	lb.	.28 -	—
Dimethylamine, 40% soln., dms., c.l., frt. equald., 100% basis.	lb.	.35 -	—
dms., t.c.l., frt. equald, 100% basis	lb.	.35½-	—
	lb.	.28 -	—
N,N-Dimethylaniline, dms., c.l., frt. alld	lb.	.28 -	—
dms., t.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.26 -	—
N,N-Dimethylformamide, dms., c.l., t.l., works	lb.	.32½-	—
dms., t.c.l., works	lb.	.33 -	.34
tanks, works	lb.	.30 -	—
2,4-Dinitroaniline, dms., frt. alld	lb.	.75 -	—
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies.	lb.	1.61 -	—
Dinitroaniline orange toner prices 1c higher W of Rockies.			
m-Dinitrobenzene, 89°C., dms.	lb.	.26 -	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E	lb.	.17¼-	—
dms., t.c.l., frt. alld. E.	lb.	.17¾-	—
tanks, frt. alld. E.	lb.	.17 -	—
2,4-Dinitrophenol bbls.	lb.	.41 -	—
2,4-Dinitrotoluene, oil, dms.	lb.	.11 -	—
Refd. 63°C. dms	lb.	.23 -	—
Dioctyl adipate, dms., c.l., works	lb.	.42½-	—
dms., t.c.l., works	lb.	.43½-	—
tanks, works	lb.	.40 -	—
Dioctyl phthalate, dms., c.l., frt. alld. E	lb.	.29 -	—
dms., t.c.l., frt. alld. E	lb.	.30½-	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.27 -	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.26½-	—
Dioctyl phthalate prices ¾c. higher in West.			
Dioctyl sebacate, dms., c.l., works.	lb.	.61¼-	—
dms., t.c.l., works	lb.	.62¼-	—
dms., l.c.l., works	lb.	.62¼	—
tanks, works, dlvd.	lb.	.59¼-	—
1,4-Dioxane, dms., c.l., frt. alld. E.	lb.	.31½-	—
dms., t.c.l., frt. alld. E	lb.	.33 -	—
tanks, frt. alld. E	lb.	.29 -	—
Prices in the west are 2c. per lb. higher.			
Dipentaerythritol, bgs. c.l., t.l., dlvd. E	lb.	.34 -	—
bgs., t.c.l., t.t.l., dlvd. E	lb.	.35 -	—
Dipentene, dest.-dist., dms., c.l., works	gal.	.58 -	—
dms., t.c.l., works	lb.	.62 -	—
dms., t.c.l. ex whse.	gal.	.78 -	—
tankscars, works	gal.	.41 -	—
Steam dist. dms. c.l., works, South	gal.	.72 -	—
dms., t.c.l., dlvd. New York	gal.	.91 -	—
tanks, works, South	lb.	.55 -	—
Dip oil (see Tar acid oil).			
Diphenolic acid, 1,000-lb or more, bgs., works	lb.	.75 -	—
Diphenolic polyether acids, 1,000-lb. or more, bgs., works	lb.	1.00	—
Diphenyl, bgs., c.l., t.l., works	lb.	.16¾-	—
bgs., t.c.l., works	lb.	.18½-	—
tanks, works	lb.	.15¾-	—
Diphenyl oxide perfume grade, cns.	lb.	.55	.70
Diphenyl phthalate dms., c.l., works.	lb.	.52 -	—
dms., t.c.l., works	lb.	.54 -	—
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald	lb.	.32	—
bgs., t.c.l., same basis	lb.	.34	—
Refd., fused tanks, same basis	lb.	.29 -	—
Refd., diphenylamine in dms., ½c. per lb higher			
Diphenylguanadine, bgs., dms., ton lots, frt. alld.	lb.	.51 -	—
bgs., smaller lots, frt. alld	lb.	.52 -	—
Diphenylhydantoin-sodium, USP, dms	lb.	5.00	5.60
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17 -	—
dms., t.c.l., frt. alld.	lb.	.18½-	—
tanks, frt. alld.	lb.	.14¼-	—
Dipropylene glycol prices 1c. higher in West.			
Dipropylene glycol methyl ether, dms. c.l., dlvd. E	lb.	.20	—
dms., t.c.l., same basis	lb.	.21½-	—
tanks, same basis	lb.	.18½-	—
Dithiodibenzoic acid, dms., 1,000-lb. lots, works	lb.	1.80 -	—
Di-o-tolylguanidine, dms., ton lots, frt. alld	lb.	.71 -	—
dms., smaller lots, frt. alld	lb.	.72 -	—
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt alld	lb.	.58 -	—
Divinylbenzene, 20-25%, dms., c.l., works, frt equald	lb.	.20 -	—
dms., t.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.19 -	—
50-60%, dms., c.l., works, 100% basis	lb.	1.00 -	—
dms., t.c.l., works, 100% basis.	lb.	1.05 -	—
tanks, same basis	lb.	.90 -	—
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E	lb.	.50 -	—
dms, t.c.l., l.t.l., same basis	lb.	.52 -	—
Dodecylbenzene, dms., c.l., t.o.b., works, frt equald	lb.	.134 -	—
dms., t.c.l., same basis	lb.	.144 -	—
tanks, same basis	lb.	.11½-	—
Dodecylphenol, c.l., frt. alld	lb.	.22½-	—
dms., t.c.l., same basis	lb.	.23½-	—
tanks, same basis	lb.	.20 -	—
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.			
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:			
Blue, FD&C, No. 1	lb.	15.65	17.60
No. 2	lb.	15.65	17.60
Green, FD&C, No. 1	lb.	15.65	17.60
No. 2	lb.	19.60	22.85
No. 3	lb.	31.30	35.90
Red, FD&C, No. 2	lb.	3.30	4.10
No. 3	lb.	19.60	22.85
No. 4	lb	5.55	7.50
Dyes, coaltar, certified colors for drugs and cosmetics 500-lb and 1-lb. lots, dlvd:			
Yellow, FD&C, No. 5	lb.	3.30	4.10
No. 6	lb	3.30	4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:			
Black, D&C, No. 1	lb.	10.50	10.95
Brown, D&C, No. 1	lb.	15.65	16.10
Green, D&C, No. 5	lb.	15.65	16.10
No. 6	lb.	15.65	16.10
No. 7	lb.	14.25	14.80
Orange, D&C, No. 3	lb.	10.50	10.95
No. 4	lb.	19.60	20.05
No. 5	lb	3.80	4.25
Red, D&C, No. 17	lb.	10.50	10.95
No. 18	lb.	23.60	24.00
No. 19	lb.	15.00	15.45
No. 21	lb	3.90	4.35
No. 22	lb.	10.50	10.95
No. 28	lb.	24.15	24.65
No. 33	lb.	17.00	17.45
Violet, D&C, No. 2	lb.	15.65	16.10
Yellow, D&C, No. 7	lb.	10.50	10.95
No. 8	lb.	10.50	10.95
No. 10	lb.	13.05	13.50
No. 11	lb.	13.05	13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, dlvd.:			
Blue, Ext., D&C, No. 1	lb.	15.65	16.10
Green, Ext., D&C, No. 1	lb.	15.65	16.10
Red, Ext., D&C, No. 1	lb.	13.05	13.50
Yellow, Ext, D&C, No. 1	lb	10.50	10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.			
11110 Brilliant scarlet BN	lb.	1.79	—
13390 Fast blue SR	lb.	1.57	—
14025 Yellow 2G	lb.	1.26	—
14030 Orange R, extra, conc.	lb.	1.64	—
14645 Chrome black T	lb.	.77	—
14720 Rubine XX, conc	lb.	1.76	—
15510 Orange Y, extra conc.	lb.	.83	—
15575 Orange RR	lb.	.99	—
15620 Fast Red A, conc	lb.	1.61	—
15705 Chrome blue black R, conc.	lb.	1.12	—
16150 Scarlet 2RL	lb.	1.22	—
16255 Brilliant scarlet 3RN, conc.	lb.	1.26	—
16230 Fast light, orange 2G	lb.	1.39	—
17590 Brown PG	lb.	3.00	—
18050 Phloxine 2G	lb.	1.16	—
18055 Fuchsine 6B	lb.	1.55	—
18965 Fast yellow 2G	lb.	2.32	—
19140 Yellow XX	lb.	2.48	—
19555 Yellow NN, conc.	lb.	3.67	—
20170 Brown Y	lb.	1.33	—
20470 Blue black, extra, conc	lb.	1.51	—
21010 Brown, RX, conc	lb.	1.42	—
22240 Scarlet B	lb.	2.81	—
22310 Red FC	lb.	1.57	—
22311 Brown MCW	lb.	1.59	—
22610 Blue 2B, extra conc	lb.	1.51	—
23500 Red 4BX, conc.	lb.	1.80	—
24410 Sky blue FF, extra, conc.	lb.	1.95	—
24895 Brilliant yellow, conc.	lb.	3.27	—
26360 Navy blue 3R, conc.	lb.	1.84	—
26695 Black F, conc.	lb.	2.30	—
26900 Milling Red 3R, conc	lb.	2.24	—
27075 Neutral black 2B, conc	lb.	2.75	—
27720 Gray L	lb.	2.18	—
29185 Fast scarlet 4BNC	lb	2.23	—
30015 Diazo black VJ conc.	lb.	2.48	—
30045 Yellow brown K, extra	lb.	1.45	—
30235 Black EB, 200%	lb.	1.33	—
30295 Green BY, conc.	lb.	1.07	—

HARDWORKING JEFFERSON CHEMICALS

SURFONIC®

SURFACE-ACTIVE AGENTS

SPECIFICATIONS

	N-10	N-20	N-40	N-60	N-95	N-120	N-150	N-200	N-300
Specific gravity, 20/20°C.....min.	0.960	1.004	1.020	1.037	1.057	1.069	1.058(30/4)	—	—
max.	0.995	1.007	1.030	1.044	1.064	1.071	1.071	—	—
Cloud point, ml. of H_2O or °C.....min.	8.5 ml.	15.5	30 ml.	68 ml.	52°C.	50°C.	63°C.	72°C.	—
max.	12.0 ml.	19.0	36 ml.	89 ml.	56°C.	54°C.	67°C.	73°C.	—
Color, Pt-Co scale .....max.	500	300	200	200	100	200	200	200	200
Viscosity, 210°F. SUS .....min.	43	47	51	57	67	74	88	—	150
max.	48	50	54	60	70	77	90	—	170
Water, wt.% .....max.	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Odor at room temperature.....	Not objectionable								
Appearance	All products are clear and substantially free of suspended matter.								

SELECT PROPERTIES

Flash point (open cup), °F.....	355	375	435	475	500	525	500	550	—
Weight, 20°C., lbs./gal.....	8.1	8.35	8.5	8.7	8.8	8.9	8.95	9.0	9.1
Foam height, 120°F., mm. initial, 0.1 wt.%	5	5	10	12	80	110	120	—	—
Wetting time, Draves, sec. 0.25%, 1.5 g. hook.....	—	—	12	6	3	7	17	—	—
Freezing point, °C.	—	—	—	<0	5	14	23	34	44

SHIPPING AND HANDLING

SURFONIC Surface-active Agents are available in coiled tank cars, tank wagons and 17E non-returnable steel drums of 430-480 pounds capacity, from our Port Neches plant or terminals throughout the country.

Handling and storage of these products is a straightforward operation. Storage tanks should be of carbon steel according to approved codes. Heating coils and insulation will be required to maintain the higher molecular weight products in the liquid state. Normal precautions to guard against excessive atmospheric moisture pick-up should be taken. Blueprint Drawing No. F-14-248-0, "Typical Carbon Steel Storage Arrangement," is available on request.

TECHNICAL INFORMATION

The information contained here is necessarily limited . . . for helpful detailed data and applications, ask for our "SURFONIC Technical Brochure" . . . Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.

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JEFFERSON CHEMICALS

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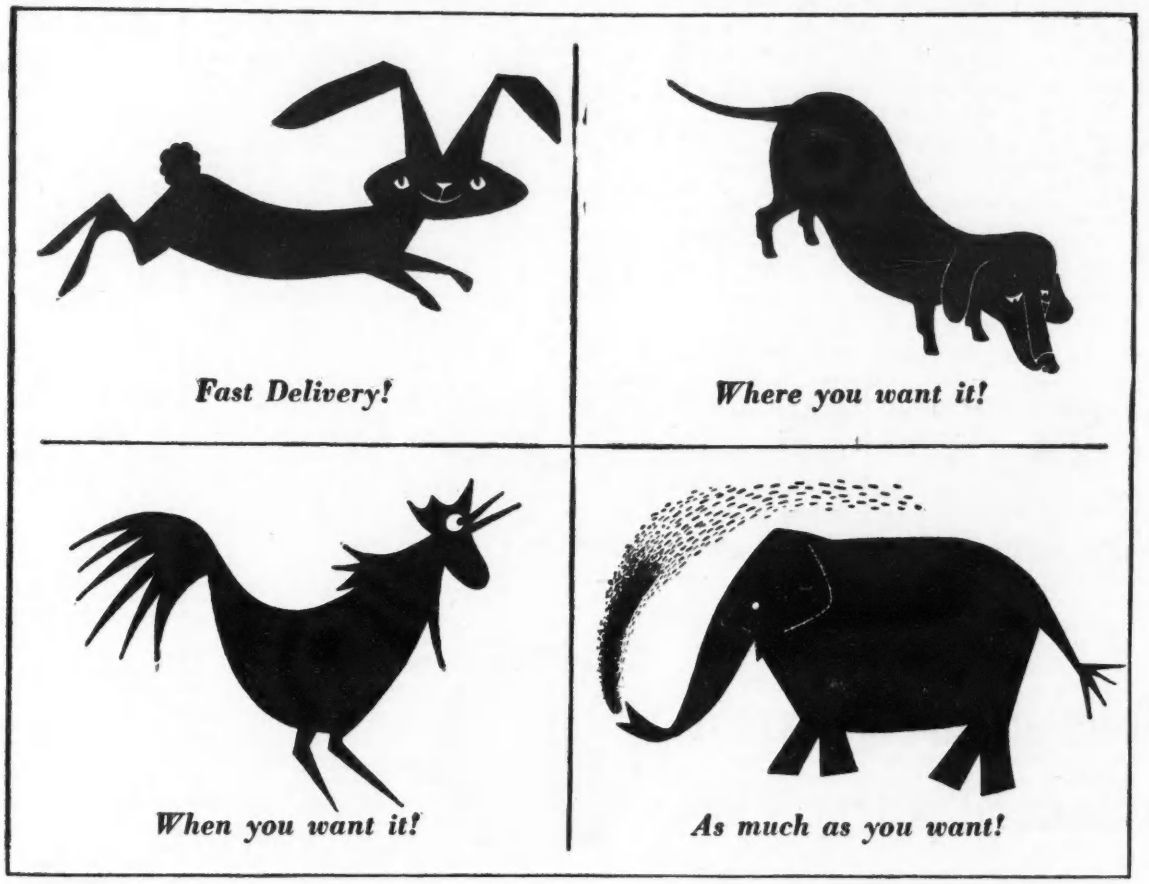


That's CSC Ethyl Alcohol!

Here are CSC's 5 Grades of Ethyl Alcohol

ROSSVILLE HEXAGON COLOGNE SPIRITS: Specially refractionated grain spirit. Unsurpassed in purity, clarity and freedom from foreign odor. *The* choice for the finest perfumes, colognes and toilet waters. Available at 190 proof, pure or specially denatured.

ROSSVILLE ALGRAIN®: Highly refined grain alcohol. Free from foreign odor and flavor. Meets the most rigid standard of purity. For use in medicinals, perfumes, toilet waters and flavoring extracts. 190 proof, pure or specially denatured.

ROSSVILLE GOLD SHIELD®: Of uniform high purity. Free from foreign odor and flavor. Widely used for industrial, scientific, pharmaceutical and cosmetic purposes. 190 or 200 proof, pure or specially denatured.

DENATURED: CSC makes available the more than 50 formulas of specially denatured alcohol authorized by the Bureau of Internal Revenue. These are usually prepared from 190 proof ethyl alcohol but anhydrous formulas are also available. All authorized formulas of completely denatured alcohol also available — either anhydrous, 190 or 188 proof.

PROPRIETARY SOLVENTS: Shellacol®, Quakersol®, Fotocol® and Quixol®, CSC's line of alcohol-type solvents. They possess the valuable solvent properties of the completely denatured alcohols and at the same time offer the additional advantage of mild odor and freedom from objectionable characteristics. Individual data sheets for each of these products are available.

INDUSTRIAL CHEMICALS DEPARTMENT

COMMERCIAL SOLVENTS CORPORATION

260 MADISON AVENUE, NEW YORK 16, N. Y.

Atlanta • Boston • Chicago • Cincinnati • Cleveland • Detroit • Kansas City
Los Angeles • New Orleans • Newark • New York • St. Louis • San Francisco

IN CANADA: McArthur Chemical Co. (1958) Ltd., Montreal • IN MEXICO: Comsolmex, S. A., Mexico 7, D. F.

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale of prototype), contract, dlvd No.

35660 Brown B ..... lb. 2.89 - —
37565 Naphthol SWF ..... lb 1.85 - —
40000 Yellow 2G ..... lb 1.44 - —
41000 Yellow OX ..... lb 2.45 - —
42000 Green V, crystals ..... lb 2.73 - —
42040 Brilliant green G crystals lb 3.62 - —
42090 Blue EG ..... lb 1.85 - —
42100 Milling green 6B, conc. lb 4.78 - —
42640 Violet 4BXN ..... lb 2.43 - —
43830 Brilliant blue, BBG ..... lb 2.44 - —
44045 Blue B, extra conc. ..... lb 3.61 - —
45170 Red BX ..... lb 4.76 - —
50415 Nigrosine SSJ ..... lb 1.03 - —
52015 Blue GXX ..... lb 2.54 - —
58005 Alizarin red SC ..... lb 3.64 - —
59700 Golden orange GFD, single paste lb 2.70 - —
59710 Flaming orange 6RD double powder lb 4.90 - —
59800 Dark blue BO, single paste lb 2.28 - —
59825 Jade green NC supra, double paste lb 1.75 - —
61570 Alizarin green CG extra lb 3.81 - —
63010 Alizarin blue SAPG lb 3.90 - —
63615 Alizarin blue black B lb 3.26 - —
69025 Blue BLFD double paste lb 2.76 - —
70800 Brown BR single paste lb 2.03 - —

Dyes, coaltar oil-soluble, 100-lb drums dlvd. No

12140 Oil scarlet BL ..... lb 1.87 - —
12055 Oil orange 7078 V ..... lb 1.38 - —
26120 Oil red N 1700 ..... lb 1.94 - —

Dyes, coaltar, oil-soluble, 100 lb. drums, dlvd. No.

42535B Methyl violet base ..... lb 1.88 - —
44045B Victoria blue base ..... lb 4.06 - —
50415B Oil black 8603 ..... lb .80 - —
61565 Alizarin cyanine green base, lb. 6.13 - —

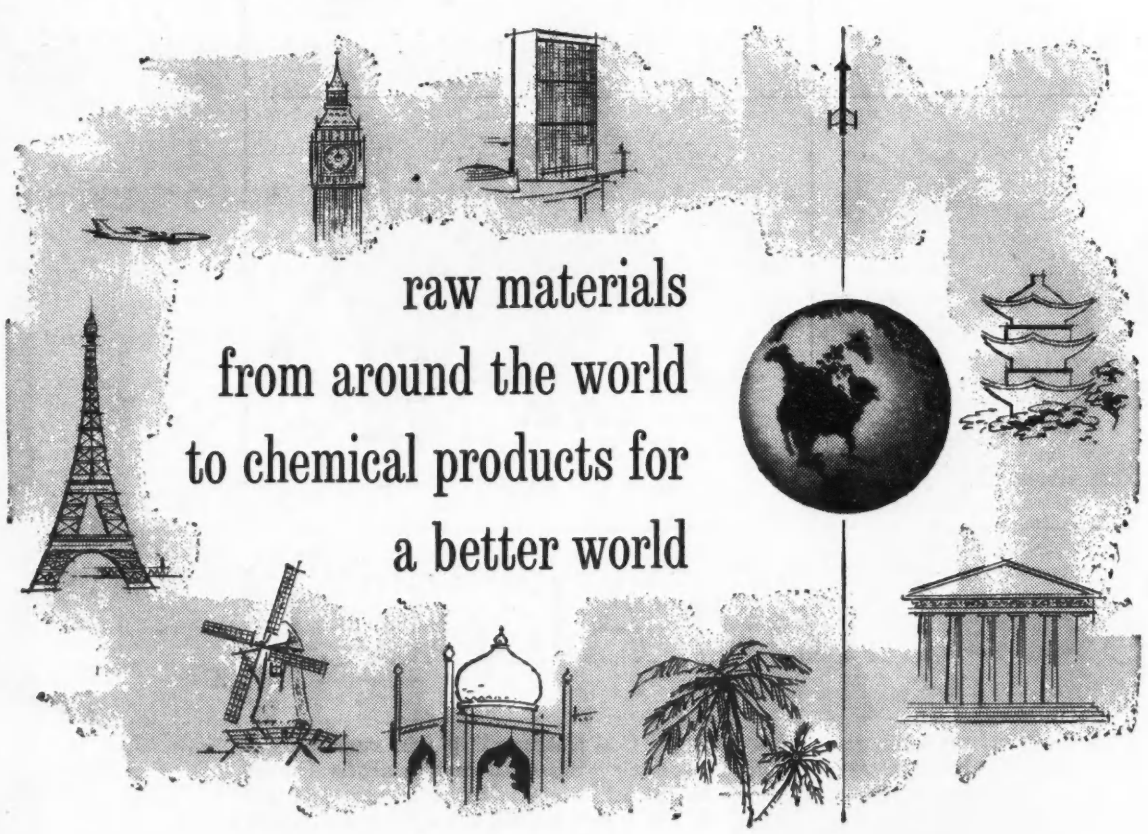
Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black RB lb. 3.89 - —
Spirit brown GN ..... lb. 5.30 - —
Spirit orange R conc. ..... lb. 5.87 - —
Spirit red B conc. ..... lb. 6.41 - —
Pr. 517 Spirit yellow 2R conc lb 4.62 - —
Pr. 554 Spirit blue THN ..... lb 5.06 - —

E

Echinacea root, bls. ..... lb 1.25 - —
Elm bark, grinding, bls. ..... lb .30 - .32
Powd., bbls., kxs ..... lb. .60 - —
Select, bundles ..... lb. .75 - —
Emetine hydrochloride, USP bots. oz. 48.40 - —
Endrin, tech. dms., 100-lbs or more, 100% basis, dlvd lb. 2.77 - —
Eosin red toner bbls. works lb 1.95 - —
Ephedrine syn., USP, anhyd., bots. 100-oz lots oz. .98 - 1.00
hydrous, bots, 100-oz lots, oz. .92 - —
Ephedrine hydrochloride NF, dms., 100-oz., f.o.b. works oz. .75 - —
Ephedrine sulfate USP, cryst., dms., 100-oz f.o.b works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —

Epichlorohydrin, dms., c.l., dlvd lb. .29½- —
dms., l.c.l., dlvd. ..... lb. .31 - —
tanks, dlvd. ..... lb. .27 - —
-Epinephrine base, syn. USP bots., 100 gram lots gram .58 - —
Epsom salt (see Magnesium sulfate).
Erigeron oil cns ..... lb. 11.00 - —
Ergot, NF, dms., tin-lined ..... lb. 2.00 - 2.50
Eserine salicylate, bots ..... oz. 34.50 - 40.00
Eserine sulfate bots ..... oz. 86.00 - —
Ester gum, gum-rosin type, dms., c.l. dlvd. Ill., Md. Ky., E. States, Minneapolis, N. C., Ohio St. Louis, St Paul Va., W Va lb. .18½- —
Wood-rosin type dms. c.l., same basis lb .18½- —
Ether (see specific product)
Ethyl acetate, nat., ferment, 85-88%, dms. c.l. dlvd lb .15 —
dms., t.c.l., dlvd lb .16½- —
tanks dlvd lb .12½- —
95-98% dms. c.l., dlvd lb. .15¼- —
dms., t.c.l., dlvd lb .16¾ —
tanks, dlvd lb .12¾- —
Ethyl acetate nat. ferment, 99%, dms. c.l. dlvd lb. .15½- —
dms., t.c.l., dlvd lb .17 - —
tanks, dlvd lb .13 - —
syn., 85-88% dms., c.l. dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb .12½- —
Ethyl acetate, syn. 95-98%, dms., c.l., dlvd lb. .15¼- —
dms., t.c.l., dlvd lb. .16¾- —
tanks dlvd lb. .12¾- —
99%, dms. c.l., dlvd. lb. .15½- —
dms., t.c.l., dlvd. lb .17 - —
tanks dlvd lb .13 - —
Ethyl acetoacetate, dms., c.l., dlvd. lb. 58½- —
dms., t.c.l., dlvd. ..... lb. .60 - —
tanks, dlvd ..... lb .56 - —

Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .34¾- —
dms., l.t.l., dlvd ..... lb. .35¾- —
tanks, dlvd. ..... lb. .32¼- —
Ethyl alcohol, 190 pf., USP, tax paid dms. c.l., dlvd. E. of Rockies gal. 20.63 —
dms., t.c.l., same basis gal. 20.73 -20.94
Ethyl alcohol, 190 pf., USP, tax-free, dms. c.l. dlvd. E. of Rockies gal. .68 —
dms., t.c.l., same basis gal. .78 .89
tanks, same basis gal .52 —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd E. of Rockies gal. 21.75 —
dms., t.c.l., same basis gal. 21.85 -21.96
tanks same basis gal. 21.59 —
Ethyl alcohol denatured (see Denatured alcohol, ethyl)
Ethyl aminobenzoate USP (see Benzocaine).
Ethyl amyl ketone dms. c.l., dlvd. lb. .20 —
dms. t.c.l. same basis ..... lb. .21½ —
tanks same basis ..... lb 17½ —
Ethyl benzoate bots. ..... lb. .75 1.00
Ethyl bromide tech., 98%, dms., c.l., frt. alld. E lb. .43 —
dms. t.c.l. frt alld E lb. .45 —
tanks, frt. alld. E ..... lb. .40 —
2-Ethyl butyl alcohol, dms., c.l., works lb. .30 —
dms., t.c.l., works ..... lb. .30¾- —
tanks, works ..... lb. .28 —
Ethyl butyl ketone dms., c.l., t.l., works lb. .36 —
dms t.c.l., t.l. works lb. .36¾- —
tanks works lb. .34 —
Ethyl butyrate dms. works lb. .85 1.00
Ethyl carbamate (see Urethane)
Ethyl cellulose, vis. 4 cps. bgs., 5,000 lb lots or more, frt. alld E lb. .73 —
bgs. smaller lots frt alld E lb. .75 —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 —
bgs., smaller lots frt alld E. lb. .70 —
Ethyl chloride tech., cyls., works. lb. .20 22
dms., works ..... lb. 18 20
tanks works ..... lb 10 —
Ethyl cinnamate, cns ..... lb. 3.35 - 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd E lb. .63½ —
dms., t.c.l. dlvd E lb. .44½- —
tanks, dlvd E lb. .41½- —
Ethyl ether, absolute, ACS, dms lb. .27 —
Anesthesia USP dealers, 1-lb. cns lb. 1.01 - —
½ lb. cns ..... lb. 1.09 - —
¼-lb cns. ..... lb. 1.21 - —
Indust., dms. c.l., dlvd. ..... lb. .13½- —
dms., t.c.l., dlvd. E ..... lb. .15 - —
tanks, dlvd E. ..... lb. .11 —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 —
dms., t.c.l., t.t.l., dlvd. E lb. .38½- —
tanks, dlvd E. lb. .34½ —
2-Ethyl hexoic acid, 1c higher W of Rockies.
2-Ethylhexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E lb. .39½- —
dms., l.t.l., same basis ..... lb. .40½- —
tanks, same basis ..... lb. .37 - —
2-Ethylhexyl alcohol, dms., c.l., dlvd. E lb. .23¾- —
dms., t.c.l., dlvd. E ..... lb. .25¼- —
tanks, dlvd. E ..... lb. .21¼- —
Ethyl iodide, chys., works .... lb. 3.30 - —
Ethyl methacrylate, dms. c.l., frt. equald lb. .52 —
dms., t.t.l. frt equald lb. .52½- —
tanks, frt. equald lb 50 —
Ethyl morphine hydrochloride, USP bots oz. 11.85 - —
Ethyl oenanthate, dms lb. 1.05 1.30
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist (see Tetraethyl orthosilicate).
Ethyl silicate 40% available SiO, dms., c.l., dlvd. E lb. .44 - —
dms., t.c.l., dlvd. E ..... lb. .45½- —
tanks, dlvd. E ..... lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works, lb 1.04 - —
N-Ethyl-m-toluidine, tech., uq., tanks frt. alld lb .83 - —
N-Ethyl-o-toluidine, bbls ..... lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., t.c.l., frt. alld ..... lb. .58 - —
tanks, frt. alld ..... lb. .55 - —
Ethylbenzene, 99% dms., c.l., t.l., frt. equald lb. .14 - —
dms, t.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .11½- —
Ethylene, contract refy gate .. lb. .0475- .0530
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., t.c.l. frt. equald ..... lb. .31½- —
tanks, frt equald .... lb. .28½- —
Ethylene dichloride dms., c.l., dlvd. lb .11½- —
dms., t.c.l., same basis ..... lb. .13 - —
tanks, same basis ..... lb. .09 - —
Ethylene dichloride prices W of Rockies, 1c. per lb. higher
Ethylene glycol, indust., dms., c.l., dlvd E lb. .16 —
dms., t.c.l., same basis .... lb. .17½- —
tanks, same basis .... lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 —
dms., t.c.l., dlvd. E ..... lb. .23½- —
tanks, dlvd E ..... lb. .19½- —
Ethylene glycol monoethyl ether, dms. c.l., dlvd. E lb. .21 —
dms., t.c.l., dlvd. E ..... lb. .22½- —
tanks, dlvd E ..... lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., t.c.l., dlvd. E .... lb. .21 - —
tanks, dlvd E lb. .17 - —
Ethylene glycol monomethyl etner, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E ..... lb. .22½- —
tanks, dlvd E ..... lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., works lb. .29 - —
lb. .29 —
dms., t.c.l., works ..... lb. .29¾- —
tanks, works lb. .27 - —
Ethylene glycol monostearate, flake, 150-lb. ctn lb. .33 - —
Ethylene oxide, dms. c.l. dlvd E. lb. .21½- —
dms., t.c.l., dlvd. E ..... lb. .24½- —
tanks, dlvd E ..... lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine 85-88%, dms., c.l., dlvd E., 100% basis lb. .42 - —
dms t.c.l. dlvd E. 100% basis, lb. .43 - —
tanks dlvd E., 100% basis lb. .40 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. ..... lb. 7.40 - —
Eucalyptol, USP cns. dms lb. .85 1.40
Eucalyptus oil NF rectified, 70-75% dms lb. .45 .63
NF rectified, 80-85% dms lb .53 —
Eugenol, tech., dms ..... lb. 0.00 - —
USP, dms. ..... lb. 1.90 - —
Euphorbia herb, bls. ..... lb. .12 —



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Until a few years ago, international operations of The Harshaw Chemical Company were confined to the procurement of raw materials and the sale of finished products. Now even the manufacturing and research operations of Harshaw are international. The formation of Harshaw van der Hoorn N.V. of Utrecht, Netherlands is another expansion in international operations. Harshaw's electroplating chemicals, ceramic colors, and catalysts are now being produced in England, France, and Holland, and Harshaw's service is available to customers in the Common Market.

product manufacturing divisions

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PIGMENT
DYES AND FINE CHEMICALS
CATALYST
METALLIC SOAPS
CERAMIC COLORS

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F

F salt, paste, tech. dms., works lb. 2.30 - —
Fennel oil, sweet, USP, cns. lb. 2.60 - —
Fennel seed, Argentine, bgs. lb. .16 - —
French, light, bgs. lb. .16 - —
Indian, light, bgs. lb. .17½- —
Rumanian, bgs. lb. .14 - —
Yugoslav, light bgs. lb. .16½- —
Fenugreek seed, Moroccan, bgs. lb. .09 - —
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. 8.00 - —
dms., l.c.l., works 100 lbs. 9.00 - —
Ferric chloride indust., cryst., bbls., c.l., works 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP cryst. dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite, NF, 175-lb. dm lb. 4.25 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran, pearls, 225-lb. dm. lb. .79 - —
Ferric resinate, dms., ton lots, frt. alld lb. .45 - —
Ferric stearate dms. c.l. frt. alld. lb. .39 - —
dms. l.c.l., frt alld lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton 35.25 —
bgs., l.c.l., works ton 36.25 - 42.25
bulk, c.l., works ton 33.25 - —
Ferric-amonium citrate, NF, brown, gran., 100-lb. dms lb. .68 - —
NF, green, gran., 100-lb. dms., frt. equald lb. .68 - —
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
bgs., l.c.l., dlvd Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP cryst., bbls., dms. lb. .09½- .10
Fir balsam, Canada, bbls. gal. 34.00 - 35.00
Oregon, bbls gal. 3.40 - 4.64
Fir oil, Canada, cns. lb. 1.70 - 1.75
Fish oil, refd., alkali, dms. lb. .1330- .1380
Kettle-bodied, dms. lb. .1560- .1610
Light-pressed, dms. lb. .1180- .1230
tanks lb. .1030- —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton 92.50 - 95.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton 88.00 - —
Fleaseed (see Psyllium seed)
Folic acid, USP, nots., fib. dms., kilo lots or more gram .25 - —
10% feed grade, fib dms., 3 kilos or more kilo 30.00 - 44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l. dlvd lb. .0695- —
tanks, dlvd. lb. .0405- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85%, cbys. c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald lb. .23¼- —
dms., l.c.l., frt. equald lb. .24¾- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms. c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .11½- —
tanks, dlvd. W lb. .12½- —
Furfuryl alconol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J. lb. .20½- —
dms., l.c.l., l.t.l., Newark, N. J lb. .21½- —
dms., c.l., t.l., Memphis, Tenn lb. .19 - —
dms., l.c.l., l.t.l., Memphis, Tenn. lb. .20 - —
tanks, Memphis, Tenn. lb. .175 - —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd. lb. .19½- —
tanks, dlvd lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsemium root, bls. lb. .30 - .35
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs lb. .30 - —
Powd., bbls., bxs lb. .30 - —
Geraniol, extra cns., dms. lb. 1.75 - 2.40
Soap grade, dms lb .90 - 1.75
Standard, cns., dms. lb. 1.65 - —
Synthetic, dms lb 1.30 - —
Geranium oil, Algerian, cns. lb. 19.00 - 22.00
Bourbon, cns. lb. 20.00 - 22.00
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb 1.90 - 2.70
Synthetic, dms lb. 1.45 - —
Ginger oil, dist., bots. lb. 11.50 - 14.00
Ginger oleoresin, NF from African root, bots lb. 4.25 - 5.00
NF from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs. lb. .19½- —
Jamaican, No. 3, bgs. lb. .22 - —
Nigerian, split, bgs lb. .20 - —
Sierra Leone, bgs lb. .35 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50% dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .16½- —
Glue, bone, extracted, dry bone, 191 jellygrams, bgs., c.l., same basis lb. .19½- —
223 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½- —
150-177, bgs., c.l., dlvd lb. .22½- —
178-206, bgs., c.l., dlvd lb. .25 - —
Glue, hide, 207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½- —
267-298, bgs., c.l., dlvd lb. .32½- —
299-330, bgs., c.l., dlvd lb. .34½- —
331-362, bgs., c.l., dlvd lb. .36½- —
363-394, bgs., c.l., dlvd lb. .38 - —
Glue, hide, 395-427, bgs., c.l., dvld. lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494, bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —
Hide glue, l.c.l., prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo. 150.00 - 300.00
Bots., 50-kilo lots kilo. 100.00 - —
Bots., 500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd. lb. .1670- .1760
nat., crude, soapiye, 80%, tanks, dlvd lb. .1520- .16
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .28⅞- —
dms., l.c.l., dlvd lb. .29⅜- —
tanks, dlvd. lb. .27⅛- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .28 - —
dms., l.c.l., dlvd lb. .28¾- —
tanks, dlvd. lb. .26¼- —
nat., high gravity, dms., c.l., dlvd lb. .28¾- —
dms., l.c.l., dlvd lb. .29½- —
tanks, dlvd. lb. .27 - —
Glycerine, dom., syn., dms., c.l., dlvd lb. .29 - —
dms., l.c.l., dlvd lb. .29¾- —
tanks, dlvd. lb. .27¼- —
Imp., nat., crude, soaplye, 80%, c.l.f. lb. .15 - —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Graphite, 95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Graphite, flake, No. 1, 95%, bgs., fib. drs., ex whse lb. .29 - .31
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis lb. .42 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l., works lb. .21¼- —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.90 - 3.00
Gramicidin, 1 to 5 kilos, f.o.b. works. gram 4.25 - —
Grapefruit oil, dms lb. 2.75 - 2.90
Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
Grease, white, choice all hog, tanks, dlvd lb. .09¾- .09½
Yellow, tanks, dlvd. lb. .06⅝- —
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .11½- —
dms., l.c.l., same basis lb. .13½- —
tankcars, same basis lb. .10 - —
Extda winter, strained, dms., c.l., Chicago lb. .14½- —
dms., l.c.l., same basis lb. .16½- —
tankcars, same basis lb. .13 - —

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Grease Oil—Iron Oxide

Grease oil, prime, burning, dms., c.l., same basis, Chicago	lb.	.16½-	—
dms., l.c.l., same basis	lb.	.18½-	—
tankcars, same basis	lb.	.15 -	—

Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green

Grindelia robusta herb	bls	.40	—
Guaiacol NF cryst. dms. tins	lb	2.10	2.15
Guaiacol, NF, liq., cbys., dms	lb.	2.30	- 2.40
Guaiacwood oil cns	lb	.65	.80
Guaiacol carbonate NF VII, dms	lb	3.40	3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt	lb.	.38	- —
bgs., l.c.l. same basis	lb.	.40	- .42
Indust., bgs., c.l., same basis	lb.	.32	- —
Tech., bgs., c.l., same basis	lb.	.30	- —

GUMS

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls. c.l., frt. alld., 100% basis	lb.	1.00	- —
bbls., l.c.l., same basis	lb.	1.05	- —
Hansa yellow 10 G, bbls., dlvd. E. of Rockies	lb	2.45	—
Hansa G yellow, pigment, bbls	lb	2.20	—
Hawthorn berries, bgs.	lb.	.18	.20
Heliotropin 100-lb lots, dms.	lb.	2.60	3.40
Hellebore root dom., green, bls	lb	.70	.75
Helonias root bls	lb	1.50	—
Hemlock oil, cns.	lb.	2.55	3.00
Henbane leaves, bls	lb.	.40	- .45
Heptachlor dms. c.l., t.l., frt. alld., 100% basis	lb.	.96	- —
Heptane, indust., tankcars, New Jersey and New York Houston Texas	gal.	.20	- —
	gal.	.1625	- —
Hesperidin, purif., 50 kilos, f.o.b. works	kilo.	19.70	- —
Hesperidin methylchalcone, 50 kilos, f.o.b. works	kilo.	49.25	- —
Hexachlorophene dms., 1,100 lbs. or more	lb	1.84	- —
dms. to 1,100 lbs.	lb	1.94	- —
Hexalin (see Cyclohexanol).			
Hexamethylenetetramine, tech. bgs., 20,000-lb lots or more, Perth Amboy or New York City	lb.	.233	- —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb lots, same basis	lb.	.243	- —
bgs., smaller lots, same basis	lb.	.253	- —
fib dms., 1,000-lb. lots or more, same basis	lb.	.250	- —
fib dms., smaller lots, same basis	lb.	.253	- —
Hexamethylenetetramine, USP bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia	lb.	.42½-	—
bgs., smaller lots, same basis	lb.	.43½-	.48½
Hexane, industrial, tankcars, New Jersey and New York Houston Texas	gal.	.20	- —
	gal.	.16	- —
l-Hexanol, dms., c.l., works	lb.	.35	- —
dms., l.c.l., works	lb.	.35¾	- —
tanks works	lb	.33	—
Hexyl cinnamic aldehyde, dms	lb.	3.95	- 4.00
n-Hexyl methacrylate dms., c.l., works	lb.	.75½	- —
dms. l.c.l. works	lb.	.76	—
Hexyl salicylate, dms.	lb.	1.70	- 1.75
Hexylene glycol, dms., c.l., dlvd	lb.	.17½	- —
dms., l.c.l., dlvd.	lb.	.19	- —
tanks, dlvd	lb.	.15	- —
Hexylresorcinol, USP, dms., 25-lb. lots or more dlvd	lb.	14.00	- —
dms. smaller lots, dlvd	lb.	14.50	- —
Homatropine hydrobromide, USP, bots	oz.	3.25	- —
Homatropine methylbromide, USP, bots	oz.	3.00	- 3.25
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton.		6.75	- —
Horehound herb, bls	lb.	.18	- .20
Hydrastis (see Goldenseal).			
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35	- 1.55
100% ret. dms., works	lb.	1.60	- 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works	lb.	2.92	- —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd, zone 1	lb.	.29¼	- —
dms., l.c.l., dlvd, zone 1	lb.	.29¼	- .304
tanks, dlvd, zone 1	lb.	.27¼	- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt equald	lb.	.48	.56
Hydrochloric acid, anhyd. (see Hydrogen chloride).			
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs.		2.50	- —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs		2.90	3.05
tanks, works, frt. equald	ton.	28.00	—
20°, cbys., c.l., works 100 lbs.		2.75	- —
cbys., l.c.l. dlvd Metropolitan area 100 lbs		3.15	- —
tanks, works, frt equald	ton.	30.00	- —
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs		3.25	- —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs		3.65	- —
tanks, works, frt equald	ton.	35.00	- —
Hydrochloric acid CP, USP, consumers cbys, extra, c.l., works	lb.	.15¾	—
cbys, l.c.l., same basis	lb.	.17¼	.17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis.	lb.	.20¾	—
Hydrocortisone acetate, bulk, bots., kilo lots or more	gram.	.95	- —
Hydrocortisone alcohol, bulk, bots., kilo lots or more	gram.	1.00	- 1.90
Hydrocyanic acid, dilute, NF, 2%. 5-pint bots., f.o.b. works.	pint.	.70	- —
Hydrofluoric acid, annyd. (see Hydrogen fluoride)			
Hydrofluoric acid, aqueous, 40%. 55-gal or 30-gal dms., c.l., t.l., dlvd 100 lbs		19.25	- —
55-gal. dms., l.c.l., t.t.l., dlvd 100 lbs		20.75	—
20-gal. dms., c.l. t.l., dlvd 100 lbs		21.00	—
Hydrofluoric acid, aqueous, 70%, 20-gal., dms., l.c.l., t.t.l., dlvd 100 lbs.		22.50	- —
tanks, works frt equald 100 lbs		13.40	—

Delivered prices apply to all states east of Arizona California Colorado Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming In those states add $2.70 per cwt. for drum delivery

Hydrofluosilicic acid dms., works, 30% basis	lb.	.07	—
Hydrofuramide dms., tib ctns., works	lb.	.30	.40
50-lb. cyls., l.c.l., works	lb.	.55	.60
Hydrogen chloride anhyd., 50-lb. cyls. l.c.l., works	lb.	.45	- —
Hydrogen cyanide liq., 98% tanks, works	lb.	.14	- —
Hydrogen fluoride, annyd., cyls., dlvd. E	lb.	.30½	.32½
cyls., dlvd W	lb.	.39	—
tanks, works	lb.	.18	—
Hydrogen peroxide 35%, dms., c.l., dlvd	lb.	.202	—
dms., l.c.l., dlvd.	lb.	.211	—
tanks, dlvd	lb.	.1800-	—
Hydroquinone, photo grade, dms., 50-lbs. f.o.b works	lb.	1.10	—
Tech., dms., c.l., dlvd.	lb.	.82½	- —
dms., l.c.l. dlvd	lb.	.84½	- —
Hydroquinone monomethyl ether, dms., t.l. dlvd	lb	2.59	- —
dms., t.t.l., dlvd	lb	2.61	- —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago	lb.	.11	- —
tanks Belle W Va	lb	.073	—
Hydroxycitronellal, cns.	lb.	5.70	- 6.00
Hydroxyethyl cellulose, all grades, fib dms. 20,000-lb lots or more, f.o.b shipping point	lb.	.84	- —
fib dms., 2,000 to 19,999-lb lots, same basis	lb.	.89	- —
fib dms., 100 to 1,999-lb lots, same basis	lb.	.93	- —
fib. dms., smaller lots, same basis	lb	1.03	—
Hyoscine salts (see Scopolamine)			
Hyoscyamine hydrobromide, bots.	oz.	7.75	8.50
Hyoscyamine sulfate, bots	oz.	7.75	8.50
Hypophosphorous acid, purit., 50%, 10-cbys. f.o.b works	lb	1.95	- —
NF, 50%, 10-cbys., same basis	lb.	1.35	- —

I

Ichthammol, NF, dms.	lb.	.75	1.00
Indigo (see Dyes, coaltar, 1171 indigo, syn.)			
Indole, CP bots.	lb.	13.75	-15.00
Inositol, 50-100 lb dms., 1,000 lbs. or more, dlvd	lb	4.50	—
Inositol, 50-lb. dms. less than 1,000 lb., dlvd	lb	4.75	- —
10 lb cns., 10-50 lbs. dlvd	lb	5.00	- —
5 lb bots., dlvd.	lb	5.25	- —
Insect flowers (see Pyrethrum).			
Iodine, crude, kgs.	lb.	1.10	- —
Resub., USP, dms., f.o.b. works	lb.	2.20	- 2.23
Iodochlorohydroquinolin, USP, dms.	lb	3.60	- —
Iodoform, NF dms. 300-lbs. f.o.b works	lb	4.90	- —
dms., 100-lbs., same basis	lb	5.05	- —
a-Ionone, cns.	lb	4.60	5.75
b-Ionone, cns	lb	4.15	6.15
Ipecac root, whole, bgs	lb.	8.00	- 8.50
Powd., bbls., bxs	lb.	9.50	-10.00
Irish moss, bleached, prime, bls	lb.	.25	.27
Iron blue, alkali-resisting, bbls., c.l., dlvd, E	lb.	.60	- —
bbls., l.c.l. ton lots same basis.	lb.	.61	- —
bbls., smaller lots, same basis.	lb.	.62	- —
Dom., reg. bbls., c.l., dlvd, E	lb.	.55	- —
Iron blue, alkali-resisting dom., reg., bbls., c.l., ton lots, same basis	lb.	.56	- —
bbls., l.c.l., smaller lots same basis	lb.	.57	- —
Imp., British, reg., bbls. c.l. dlvd. E	lb.	.48	- —
bbls. l.c.l. ton lots, same basis	lb.	.49	- —
Iron blue, British, reg., bbls., l.c.l., smaller lots, same basis.	lb.	.50	- —

Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col and Nev.

Iron compounds (see Ferric or Ferrous)			
Iron oxide, black, pure, bgs., c.l., works	lb.	.14¾	- —
bgs. l.c.l., works	lb.	.15	—
Iron oxide, brown, pure, bgs., c.l., works	lb.	.14¼	- —
bgs., l.c.l., works	lb.	.14½	—
Iron oxide, metallic, brown, bgs., works	lb.	.05½	—
Iron oxide Persian Gulf, red., bgs., c.l., works	lb	.08¾	—
Iron oxide, red dom., pure bgs., Bethlehem, E St. Louis, New York City	lb.	.14¼	—

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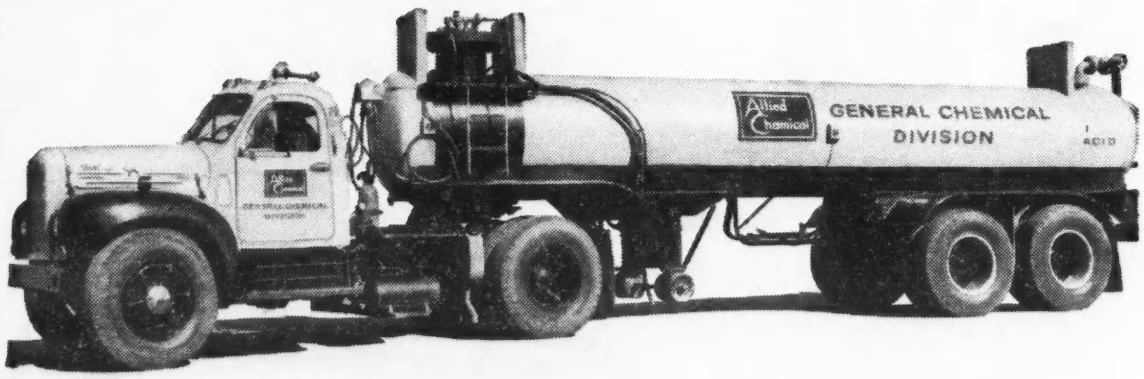

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Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse, New York lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¾- .07
Peruvian type, bgs., l.c.l lb .023 .024
Iron oxide, yellow, pure, light lemon shade bgs c.l. works lb .12¼ —
other shades, same basis lb. .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis lb .29 - —
tanks, same basis lb .25 —
Isoborneol cns. lb. 1.44 1.80
Isobornyl acetate cns. lb 46 .56
Isobornyl formate, dms lb. 1.15 1.20
Isobornyl propionate, dms lb. 1.20 - 1.25
Isobutyl acetate perfume grade cns lb. .30 - .35
Isobutyl acetate, solvent grade, dms., c.l., dlvd E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Isobutylene, 99% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd lb. .19½- —
Isobutyric acid, dms. c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., t.l., same basis lb. .36½- —
t.c. t.t., same basis lb .33 —
Isobutyronitrile, dms., c.l., dlvd. lb. .47½- —
dms., l.c.l., dlvd lb. .48½- —
tanks, dlvd. lb. .45 —
Isoeugenol, cns. lb. 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 - —
Isonicotinic acid, 100-lb tib dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid)
Iso-octyl alcohol, dms., c.l., dlvd E. lb. .23½- —
dms., l.c.l., dlvd E. lb. .25 - —
tanks, dlvd E lb. .21 —
Isopentane, coml. grade, tanks, f.o.b Tex refy gal. .16½- —
Isophorone, dms., c.l., dlvd lb. .24½- —
dms., l.c.l., dlvd lb. .25¼- —
tanks, dlvd lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .18 - .19
dms., l.c.l., same basis lb. .19 - .20
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate dms. c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms. l.c.l., dlvd. gal. .68 - —
tanks, dlvd gal. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd gal. .60 - —
dms., l.c.l., dlvd gal. .70 - —
tanks dlvd gal. .44 - —
Isopropyl alcohol, anhyd., c.l., dlvd. gal. .62 - —
dms. l.c.l., dlvd. gal. .72 - —
tanks, dlvd gal. .46 - —
Isopropyl benzene (see Cumene)
Isopropyl ether, dms. c.l., dlvd lb. .09½- —
dms. l.c.l. dlvd lb. .11 - —
tanks, dlvd lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l. works lb. 1.00 —
dms., l.c.l. works lb. 1.05 - 1.25
tanks, works lb. .99 —
Isopropylamine (see Mono, Di, or Tri-)
Isopropyl-N-phenyl carbamate, 450-lb fib dms. c.l., t.l., works lb. .75 - —
450-lb fib dms. l.c.l. works lb. .80 .90
Isoquinoline, dms., works lb. 65 1.25
Itaconic acid, refd. bgs c.l. f.o.b. works lb. .39½- —
bgs., l.c.l., same basis lb. .41 - .43
Tech., bgs., c.l., same basis lb. .34½- —
bgs., 500-lbs. same basis lb. .36 - —

J

J acid, paste bbls., works, 100% basis lb 2.70 - —
Powd. bbls, same basis lb 2.75 - —
Jalap root, NF, bls lb. .55 - .60
NF, powd., bbls., bxs lb. .65 - .70
Japan wax, cs lb. .29 .31
Juniper berries, bgs. lb .16 .17
Juniper berry oil, NF, bots. lb 2.90 3.75
Twice rectified, bots lb 3.25 - —
Juniper tar oil, NF, dms lb .42 - .60
Juniper wood oil, tech. cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd, fib dms lb. .10 - .12
NF colloidal 50-lb bgs lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 .50
No. 2, powd. bbls. lb. .43 .45
No. 3, powd. bbls. lb. .37 .40
Koch acid, bbls, frt. alld., 100% basis lb. 1.00 —
Kola nuts, bgs. lb. .11 - .12

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F b.r., tankcars, New Jersey and New York gal. .20 —
Group 3 gal. .15125- —
Houston, Texas gal. .16 —
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 —
Group 3 gal. .14125 —
Houston, Texas gal. .16 —
Lactic acid, edible, 50%, bbls dms., c.l., frt equald lb. .1985- —
bbls. dms., 20 or more, frt. equald lb. .2035- —
bbls. dms. 5 to 19, frt equald, lb. .2085- —
bbls. dms. 1 to 4, frt equald, lb 2135- —
Lactic acid, edible 80% bbls., c.l., dms. frt equald lb. .3335- —
bbls. dms 20 or more, frt equald lb .3385- —
Lactic acid edible, 80% bbls., dms., 5 to 19, frt. equald lb .3435- —
bbls. dms. 1 to 4 frt equald, lb .3485- —
Plastic grade, 50% c.l., bbls., works lb .2740- —
bbls. 20 or more, works lb .2790- —
bbls. 5 to 19, works lb .2840- —

Lactic acid, plastic grade, 50%, c.l., bbls., 1 to 4, works lb. .2890- —
80% bbls. c.l. works lb. .4825- —
bbls. 5 to 19, works lb. .4725- —
bbls., 1 to 4, works lb. .4775- —
Lactic acid, tech., 44%, bbls., c.l., works 100 lbs. 12.45 - —
bbls., l.c.l., works 100 lbs. 12.85 - —
USP, 85% cbys. lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots, frt equald lb. .14¾- —
bgs., 200-lb lots, frt equald lb. .15¼- —
Edible lactose in fib dms. ½c higher.
Lactose, ferment, grade, bgs., c.l., works lb. .08¾- —
Lactose, USP, reg., fib dms., 30,000-lb lots, frt equald lb. .21½- —
fib dms., 2,000-lb lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18¼- —
bgs. t.t.l. frt equald lb .19 19¼
Lady's slipper root, bls lb. 3.00 3.50
Lamp black, bgs., c.l., works lb. .16 .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 .28
USP, annyd., cosmetic, 400-lb. dms., works lb. .26 .30
USP hydrous, 400-lb dms., works. lb .20 —
Lard, cash, dms., Chicago lb. .1340- —
Lard oil (see grease oil).
Larkspur seed bgs lb. .55 —
Laurel leaf oil dms. cns lb 9.75 - 12.50
Laurent's acid bbls lb .70 —
Lauric acid, pure, dms. lb. .30¼- .32¾
bags lb. .28¾- .31¼
tanks lb. .27¾- —
Lauryl alcohol, bots. lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .85½- —
dms., t.t.s., works lb. .66 - —
Lavandin oil, 32-34%, dms. lb. 1.15 - —
Abrial, dms. lb. 1.20 - —
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls. lb. .90 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester, cns lb. 5.00 7.75
Spike, Spanish, cns lb. 1.75 - 2.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd. bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs or any quantity frt. alld on $150 or more lb. .30½- —
1-lb bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb. .17 - —
bbls. l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, 400-lb. fib. dms. lb. .56 - —
Lead iodide, NF, V jars lb 3.82 - —
Lead linoleate, fused, 26.5% Pb, dms. lb. .38 - —
Lead metal, prime, pigs, New York lb. .11 - —
St. Louis lb. .1080- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 18% Pb., dms., dlvd lb. .19½- —
24% Pb., dms., dlvd. lb. .24¼- —
Solid, 37% Pb., dms. dlvd lb .31¾- —
Lead nitrate, tech., cryst., 400-lb. fib. dms lb. .2675- —
Lead orthosilicate gel., 50-60% PbO, dms. works lb. .29¾ .34½
Lead peroxide, tech powd., bbls lb. .45 .50
Lead phthalate dibasic, dms. works. lb. .41 —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
Lead, red, 98% Pb_3O_4, bbls., c.l., same basis lb. .1410- —
bbls., l.c.l., same basis lb. .1510- —
Lead, resinate, precip., 23% Pb, dms., lb. .49 - —
Lead salicylate, normal dms. works lb 46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b mfrs point, frt. alld lb .20 —
bgs., l.c.l., same basis lb .21 —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq. 18% Pb. dms lb 17¼ —
24% Pb. dms lb. .21¼- —
Solid, 30% Pb, dms. lb. .26¾- —

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Lead—Manganese Naphthenate

Lead white, basic carbonate, bgs., c.l., shipt pt., frt. alld	lb.	.18 -	—
bgs. l.c.l., same basis	lb.	19 -	—
basic silicate bgs. c.l., shipt. pt. frt alld	lb.	16½-	—
Lead white, basic silicate, bgs., c.l., shipt pt., frt. alld	lb.	.17 -	—
bgs., l.c.l., same basis	lb.	.18 -	—
Lecithin edible tech. bleached, non-ret dms. c.l. works.	lb.	.14 -	.15
non-ret dms. l.c.l., same basis	lb.	.15 -	.16
Lecithin, edible, tech., unbleached, non-ret dms. c.l. same basis	lb.	.13 -	.14
non-ret dms. l.c.l., same basis	lb.	.14 -	.15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works	kilo.	14.20 -	—
Lemon oil, USP, Calif., cns., dms	lb	1.25	1.50
Messina cns	lb	3.25	4.00
Lemongrass oil, cns., dms	lb.	2.45 -	2.50
dl-Leucine, dms., 1 kilo, works	kilo.	50.00 -	—
Licorice root gran. bls.	lb	13	—
Powd. bls.	lb	.15	.16
Whole bls.	lb	.09	.10
Lignaloe wood oil, Mexican, cns	lb.	2.75	3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)			
Lilac oil	lb.	1,500.00	

Lime, chemical (quicklime), bulk, c.l., 50,000 lbs. works, E	ton.	14.25 -	—
Chemical, hydrated, bgs., c.l., same basis	ton.	17.25 -	—
spray, bgs., c.l., same basis	ton.	18.25	—
For New York delivery, add $6.29 freight charge			
Lime oil, dist., Mexican, dms.	lb.	5.00 -	5.60
West Indian, dms	lb.	5.00 -	5.60
Expressed, West Indian, dms	lb.	6.50 -	7.75
Lime salts (see Calcium)			
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).			
Linalool, ex bois de rose oil, dms.	lb.	2.45	4.25
Syn., 98-100%, dms., works	lb	2.40	2.75
Linalyl acetate, ex bois de rose, 90-92%, dms	lb	2.65	4.50
96-98%, dms.	lb	3.25	—
Syn., 98-100%, dms., works	lb.	2.75	—
Lindane, 25% formulation, to distributors, dms. frt. alld.	lb.	1.35	1.50
Lindane, tech., to formulators, 250-lb dms. 5,000 lbs. dlvd.	lb	2.13 -	—
100-lb dms., 5,000-lbs., dlvd.	lb.	2.15 -	—
250-lb. dms., less than 5,000-lbs., dlvd	lb.	2.18 -	—
100-lb. dms., less than 5,000-lbs., dlvd	lb	2.20	—
Linden flowers, with leaves, bls	lb.	.35	.40
Without leaves, bls.	lb.	.43	.45

Linseed meal, expeller, 32% bulk, Minneapolis, mills	ton.	62.50 -	—
Extracted, 34% bulk, same basis	ton.	56.00 -	—
Linseed oil, raw, dms., c.l., New York	lb.	.1670-	—
dms., l.c.l., New York	lb.	.1760-	.1810
tanks, f.o.b. Minneapolis	lb.	.1310-	—
tanks, New York	lb.	.1422-	—
tankwagon, New York	lb.	.1472-	—
Boiled linseed oil, .006c. per lb. higher.			
Linseed oil acid, dist., dms.	lb.	.2075-	—
Water white, dms.	lb.	.2425-	—
Litharge, comi., powd. bbls., c.l., works, frt. equald	lb.	.1325-	—
bbls., l.c.l., same basis	lb.	.1425-	—
Lithium aluminum hydride, lump, dms., works	lb.	33.00	39.00
Lithium benzoate dms	lb.	1.65	1.67
Lithium bromide, NF, gran., bgs., works, frt. equald	lb	2.60	—
Lithium carbonate, NF, dms., ton lots	lb.	.58 -	—
dms., 1,999 lbs. or less	lb.	.64 -	—
Tech., dms., ton lots	lb.	.57 -	—
dms., 1,999 lbs. or less	lb.	.63 -	—
Lithium chloride CP, anhyd., dms., ton lots	lb.	1.23½-	—
Tech. anhyd. dms., c.l., t.l., dlvd. or works, frt. alld	lb.	.87 -	—
dms. l.c.l. same basis	lb.	.88 -	.92
Lithium citrate NF dms. ton lots.	lb.	1.50 -	—
Lithium fluoride dms., 20,000-lb. lots, dlvd	lb.	1.75 -	—
bbls., ton lots and more, dlvd	lb.	1.85 -	—
bbls., less ton lots, dlvd	lb.	1.90 -	—
Lithium hydride, powd., dms., 500-lbs lots or more works.	lb.	9.50 -	—
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld.	lb.	.60 -	—
dms., l.c.l., frt. alld	lb.	.64 -	—

Lithium manganite, dms., works	lb.	.95 -	1.05
Lithium nitrate, tech., dms., 100-lb. lots	lb.	1.15	1.20
Lithium salicylate, dms.	lb.	1.60	1.70
Lithium silicate, dms., works	lb.	1.10	1.20
Lithium stearate, dms., c.l., works,	lb.	.47½-	—
dms. ton lots, works	lb.	.48½-	—
dms., less-ton lots, works	lb.	.53½-	—
Lithium sulfate dms., 100-lb. lots.	lb.	1.15	1.25
Lithium titanate dms., works	lb.	1.15	1.25
Lithol red toner barium, bbls., works	lb.	1.03 -	—
Lithol-rubine red toner, pure, bbls., works	lb.	1.65 -	—
Resinated, bbls., works	lb.	1.47 -	—
Lithopone ord. bgs., c.l., dlvd E.	lb.	.08⅜-	—
bgs., l.c.l., dlvd. E	lb.	.09⅛-	—
Titanated (high-strength), bgs., c.l., dlvd	lb.	.11 -	—
bgs., l.c.l. dlvd.	lb.	.12 -	—
Lobelia herb, bls	lb.	.95 -	1.10
Lobeline sulfate bots., 50-oz. lots, works	oz.	30.00 -	—
Locust bean gum powd., bgs.	lb.	.35	.40
Lycododium, cs.	lb.	2.50 -	3.00
l-Lysine monohydrochloride, 25-lb. dms	lb.	4.95 -	—

M

Mace, Siauw, No. 1, bls.	lb.	1.58 -	—
No. 2, whole, bls.	lb.	1.40 -	—
siftings, bls	lb.	1.35 -	—
Mace oil, dist., cns., dms	lb.	9.00 -	11.00
Magnesia, calcined, tech, bgs., c.l., frt equald	lb.	.25¾-	26⅛
Tech. syn. rubber grade, light, bgs., c.l., frt. equald	lb	.28¾-	.30
rubber grade, extra light, bgs., c.l., frt. equald	lb.	.28	—
bgs. l.c.l., frt. equald	lb	.28¾	—
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points			
Magnesia, calcined, tech., heavy, 85% bgs. c.l., f.o.b. Manning, Nev	ton.	39.50 -	—
91%, bgs., c.l., same basis	ton.	49.50 -	—
95%, bgs., c.l., same basis	ton.	59.00 -	—
USP, light, bgs.	lb.	.36½-	.37⅛
USP, heavy, bgs	lb.	.36½-	.37⅛
Magnesite chemical grade, calcined, powd., bgs., c.l., works, frt equald	ton.	86.25 -	—
Chemical grade, deadburnt, standard grain, bulk, c.l. Chewelah, Wash	ton.	46.00 -	—
Magnesium bromide, 80-lb. dm., f.o.b. works	lb.	1.15 -	—
Magnesium carbonate, tech., bgs., c.l., frt. equald	lb.	.11	—
bgs., t.l., frt. equald	lb.	.11½-	—
bgs., l.c.l. frt equald	lb.	.13½	.14
Magnesium carbonate, USP, bgs., c.l., frt. equald	lb.	.13½-	—
bgs., t.l., frt equald	lb	.14	—
bgs., l.c.l., frt equald	lb.	.15	.16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.			
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l. works	lb.	.12¾-	—
dms., l.c.l., works	lb	.14	.15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works	ton.	60.00	—
bgs., l.c.l., works	ton.	75.00	100.00
Magnesium gluconate 100-lb dm., f.o.b works. E	lb.	1.42	—
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works	lb.	.24½-	25⅛
Magnesium lauryl sulfate, dms., c.l., frt. alld	lb.	.22½-	—
dms., t.l., frt alld.	lb.	.23½-	—
tanks, frt alld.	lb.	.21½-	—
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works	lb	.36	—
pigs, 10,000-lb. lots or more, works	lb.	.35¼-	—
sticks, cs., works, frt. alld on carlots	lb.	.59	—
Magnesium nitrate, cryst., dms., works	lb.	.29 -	—
Magnesium oxide (see Magnesia calcined).			
Magnesium phosphate, tribasic, NF, bbls	lb.	.75 -	—
Magnesium silicate (see Talc)			
Magnesium silicofluoride, dms., works	lb	.10½-	.12
Magnesium sulfate, tech., bgs., c.l., works	100 lbs.	2.15	—
bgs, l.c.l., works	100 lbs.	2.90	3.15
USP, cryst., bgs., c.l., works,	100 lbs.	2.35	—
bgs., l.c.l., 5,000 lbs., 1 withdrawal	100 lbs.	3.10 -	—
bgs., smaller lots	100 lbs.	3.35 -	—
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots	lb.	.38 -	—
fib. dms., 1,000-lb. lots	lb.	.40 -	—
fib. dms., 100-lb. lots	lb.	.45 -	—
Bulky and super grades of magnesium trisicilate 7c. per lb. higher.			
Malachite green, straight, PTA, bbls., works	lb.	5.30	—
Malathion, dms., c.l., works	lb.	.89	—
dms., l.c.l., works	lb.	.92	1.01
Maleic acid, cryst., powd., dms	lb.	.37¼	—
Maleic anhydride, dms., c.l., frt. equald	lb.	.24	—
dms., l.c.l., frt. equald	lb.	.25½-	—
tanks, frt equald	lb	.22½	—
Maleic anhydride in bags ½c. per lb. less			
Malic acid, tech., dms	lb.	.50	—
Mandelic acid, NF, dms., 1,000-lb. lots	lb.	2.35	—
dms. smaller lots	lb	2.40	2.50
Mandrake root, bls.	lb.	.45	—
Manganese acetate, dms., dlvd	lb.	.35	—
Manganese borate, tech., fib. dms.	lb.	.23½-	—
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works	lb.	.11	.16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works	lb.	.21¾-	—
smaller lots, works	lb.	.23½-	—
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works	ton.	148.00 -	—
40,000 to 99,999-lb. lots, paper bgs., same basis	ton.	144.50 -	—
40,000 to 99,999-lb. lots, dms. same basis	ton.	152.50 -	—
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.			
Manganese gluconate, dms	lb.	1.84 -	—
Manganese hydrate, dms., dlvd	lb.	.35 -	—
Manganese hypophosphite, NF, dms.	lb.	3.52	—
Manganese linoleate, liq., 4.35% Mn, dms	lb.	.35¾-	—
Solid, precip., 8.2% Mn. bbls	lb.	.41¼	—
Manganese metal, electrolytic, dms., c.l., dlvd. E	lb.	.34½-	—
dms., ton lots, dlvd. E	lb.	.37 -	—
dms., smaller lots, dlvd E	lb.	.39	—
Manganese naphthenate, liq., 6% Mn, dms., frt. alld	lb.	.29¾-	—

WHAT'S NEWS IN ENJAY TECHNICAL SERVICE

Fine vinyl finish at 10-18% less cost

Here is another example of Enjay customer service. Enjay has solved an important surface coating solvent problem by experimenting with various blends of methyl ethyl ketone with methyl isobutyl ketone for vinyl surface coatings. With a 50/50 blend of these Enjay solvents—users can obtain excellent surface hardness, gloss, and finish at a saving in cost per pound of solids dissolved, relative to 100% MIBK, of 10-18%. This is one more example of how Enjay is helping its customers turn out quality products at a saving.

Enjay is a convenient source of basic chemical raw materials for most industrial and chemical needs. Enjay will supply tank cars of MEK, MIBK or will split tank cars for your convenience. Contact Enjay at 15 West 51st St., N.Y. 19, N.Y.

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY
PETROCHEMICALS

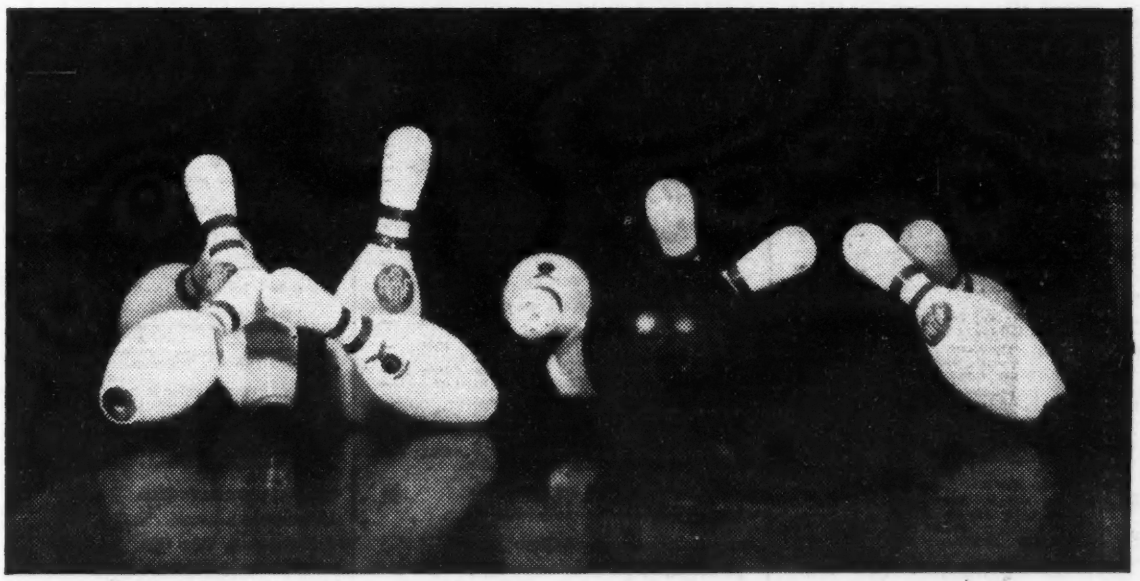
Manganese resinate, fused, 3½% Mn. dms lb .29½- —
Precip., 6½-7% Mn, dms. ... lb. .42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$ bgs., c.l., dlvd. S., E ton.86.50 - —
bgs., t.c.l., dlvd. S., E ton.93.50 - —
Manganese tallate 6%, dms. ... lb. .36½- —
Manila copal gum, C, bgs ..... lb. .35 - .39
DBB bgs. ..... lb. .25 .28
DK, dust, bgs. ..... lb. .14 Nom.
MA, soft, bgs. ..... lb. .20 .24
WS, bgs ..... lb. No stocks.
Mannitol, com'l fib dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms .... lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works ... lb. .26½- —
bgs., t.c.l., works ..... lb. .28 - —
Menadione, USP bots. ... gram. .044 .05
Menhaden oil, crude, tanks, works, Atl. ... lb. .06½- —
Menthol, nat USP, Brazilian, large crys., cs. 8.40 - —
Nat., USP, Brazilian, regular crys., cs. 8.25 - —
Japanese cs. lb.10.50 12.00
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst dms., 100 lbs f.o.b works lb 4.03 - —
USP, gran or powd., 50-lb dm., 100 lbs. f.o.b works lb 3.78 - —
Mercuric cyanide NF VIII powd., fib dms lb 5.84 - —
Mercuric iodide red, NF, 100-lb. dm. f.o.b. works lb 6.97 - —
Mercuric oxide red NF IX 50-lb dm. 100 lbs. f.o.b works, lb 4.72 - —
tech., 50-lb dm 100 lbs. same basis lb 4.52 - —
Mercuric oxide yellow, NF, 50-lb. dm. 100 lbs. same basis, lb 4.89 - —
tech., dms. 100 lbs lb 4.35 - —
25-lb fib dm ..... lb 4.38 - —
Mercurous chloride (see Calomel)
Mercurous iodide yellow, NF 100-lb. dm f.o.b works lb 8.22 - —
Mercury, ammoniated (see White precipitate USP XV)
Mercury metal 76 lbs per flask net-flask.206.00 -209.00
Mesityl oxide dms. c.l., dlvd lb .15 —
dms. t.c.l., dlvd. ..... lb. 16½- —
tanks dlvd lb 12½- —
Meta aminophenol (see m-Aminophenol)
Metachloroaniline (see m-Chloroaniline)
Metanilic acid dms works lb .57 .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms. truckloads frt equald lb .42½- —
dms. smaller lots frt equald. lb .43 .75
tanks works frt equald lb. .40 —
Methanol, nat, denaturing grade, tanks frt alld gal. .85 —
Syn. zone 1, dms. c.l., or t.l. min. dlvd gal. .51½- —
dms. t.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots. dlvd Metropolitan area gal. .35 - —
tankwagon, 4,000 gal min., dlvd gal. .30 - —
tankwagon, 4,000 gal min., f.o.b terminal gal. .29 - —
Methanol, syn., zone 2, dms. c.l., or t.l., min frt alld or dlvd. gal. .55½- —
dms., t.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal min., dlvd. gal .34 —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b works, frt equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt equald lb.27.25 —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms, t.l., frt alld. ... lb 1.10 - —
dms., t.t.l., same basis ... lb 1.16 - —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb 3.50 - —
Feed grade, 98% fib dms, same basis lb. 1.43 - —
Methoxychlor, 50% wettable powder, dealers dms. cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret dms., t.c.l. same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd zone 1 lb. .23½- —
non-ret dms. t.c.l. same basis, lb. 24 24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., t.c.l., E of Miss. frt alld gal. .62½- —
Methyl acetone syn. dms. c.l. frt. alld E gal. .66 - —
Methyl acetone, syn., dms., t.c.l., frt. alld. E gal. .76 - —
tanks frt alld E gal .51 —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼- —
dms., t.t.l., dlvd ..... lb. .36¼- —
tanks, dlvd. ..... lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., t.c.l., dlvd E. ..... lb. .18½- —
tanks, dlvd. E ..... lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
dms., t.c.l., same basis ..... lb. 2.00 - —

N-Methylaniline, tech., tanks, frt. alld lb. .80 - —
Methylanthranilate, cns. lb. 2.25 - 2.45
Methyl benzoate, cns., dms. .... lb. .90 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .52 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb lots and more, same basis lb. 76 - —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis, lb. .16¼- —
tanks, single unit, same basis, lb. .12¾- —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. .67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 —
dms., t.c.l., dlvd ..... lb. .16½- —
tanks, dlvd. ..... lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 —
dms., t.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —

Methyl formate, refd., dms ... lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works ... lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs. c.l., works lb. .24 - —
100-lb. multiwall paper bgs., t.l., min 23,000 lbs., works lb. .25 - —
100-lb. multiwall paper bgs., l.t.l, works lb. .26 - —
Methyl heptin carbonate, bots lb.27.75 -31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 —
dms., t.c.l., dlvd. ..... lb. .20½- —
tanks, dlvd. ..... lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol)
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 —
dms., t.c.l., dlvd ..... lb. .18½- —
tanks, dlvd ..... lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt equald, with Belle, W Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 —
Methyl naphthyl ketone, cryst., works lb. 2.45 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).

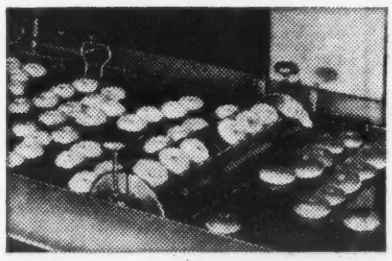
Methyl parathion, tech., 80%, dms., frt. alld E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West
Methyl roseaniline chloride, NF., 5-lb fib dms lb 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. 80½ —
dms., t.c.l., same basis lb. .62½ 67½
Methyl testosterone, USP, 100-gram. bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb. 1.32 - —
5-39 dm lots, same basis lb 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molybdated, PMA bbls., dlvd. E of Rockies lb. 2.95 - —
Tungstated, PTMA bbls., same basis lb 4.35 —
Methyl violet prices 1c higher W of Rockies
Methylene blue, fib. dms., 100-lb lots, frt. adjusted lb. 4.67 —
Methylene chloride tech., straight or assorted dms. c.l. or t.l., dlvd lb. .12½- —
dms. t.c.l., t.t.l. dlvd lb 15¾ —
tanks, 4,000-gal. min., dlvd lb. .11¼- —
b-Methylnaphthalene, 32°C., m.p., dms. works lb 90 —
Methylpentanediol (see Hexylene glycol)
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5)
Methylthionine chloride (see Methylene blue)

HOW *HERCULES* HELPS...



MARK UP A STRIKE—A "pocket hit" is a thrill for the bowler but the pins take a beating. That's one reason why AMF Pin-spotters protects its new "Chemweld" pins with a top coat based on Hercules® nitrocellulose. In actual usage these pins remain clean and require a minimum of maintenance. Rugged nitrocellulose-based protective coatings also find use in coating the alleys themselves—for a smooth, long-lasting surface.

NOURISH WESTERN CROPS—UN-32*, Hercules high-analysis nitrogen fertilizer solution, contains 32 per cent nitrogen by weight. Manufactured in California, UN-32 can be shipped to customers rapidly by tank truck, tank car or in larger quantities, via barge. A nonpressure, nonflammable material, UN-32 can be applied to soil by conventional spraying equipment, or fed into irrigating systems, or applied from the air. **Hercules trademark*



MAKE BETTER DOUGHNUTS—Starvis®, Hercules gelatinized wheat starch, increases the absorption properties of bakery mixes such as doughnut, cookie, and ice cream cone, to provide consistent quality from lot to lot. This versatile ingredient is also used in popover mixes to give high water content in the dough, and offers advantages in such other products as breading mixes and sausage binders.

HERCULES POWDER COMPANY
INCORPORATED
Hercules Tower, 910 Market Street, Wilmington 99, Delaware
CHEMICAL MATERIALS FOR INDUSTRY
HERCULES
961-B

Mica dry-grd. paint, plastic, 100 mesh, bgs. c.l., works lb .04 - —
roofing 20 to 80 mesh, works lb .03 - —
wet-grd. biotite bgs., c.l., works, frt alld.E lb .06½- —
bgs. l.c.l. ex-whse lb .07¼- —
paint or lacq., bgs., c.l., 325 mesh works. frt alld E. lb .08¼- —
bgs. l.c.l. ex-whse or freight alld E lb .09 —
Mica, wet-grd., rubber bgs., c.l., works, frt alld E lb .08 —
bgs. l.c.l. ex-whse. or frt. alld E lb .08¾ —
wallpaper bgs. c.l. works, frt. alld.E lb .08¾ —
bgs. ex-whse or frt alld E. lb .09 —
white 5-10 microns, bgs., c.l., works frt alld E lb .08¼ —
Mica, wet-grd W of Miss ½c higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb .10 .11
laminating grades, tankcars, works lb .11 .12
Mineral black bgs. works lb .0160- .0675
Mineral oil, white tech. 50-65 vis., non ret dms. c.l. f.o.b. refy gal .65 —
50-65 vis non-ret dms., l.c.l., basis gal .70 - —
tankcars refy gal .49 - —
Mineral oil white tech. 65-75 vis., non-ret dms., c.l., same basis gal .65 - —
non-ret dms. l.c.l., same basis gal .70 - —
tankcars refy gal .49 - —
NF 80-90% vis non-ret. dms., c.l. same basis gal .66 - —
non-ret dms. l.c.l., same basis gal .71 - —
tankcars refy gal .50 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., c.l., same basis gal .72 - —
Mineral oil, white, NF, 135-138 vis., non-ret dms., l.c.l. same basis gal .77 - —
tankcars rfy gal .56 - —
Mineral oil, white, NF, 145-155 vis., 5 non-ret. dms., c.l., same basis gal .78 - —
non-ret dms. l.c.l., same basis gal .83 - —
tankcars refy gal .62 - —
Mineral oil white USP, 180-190 vis., non-ret dms. c.l., same basis gal .80½- —
non-ret dms. l.c.l. same basis gal .85½- —
tankcars refy gal .64½- —
Mineral oil, white, USP, 200-210 vis., non-ret dms., c.l., f.o.b. refy gal .82½- —
non-ret dms. l.c.l. gal .87½ —
tankcars. refy gal .66½- —
Mineral oil, white USP, 340-350 vis., non-ret dms., c.l., f.o.b. refy gal .87½- —
non-ret dms. l.c.l. gal .92½ —
tankcars refy gal .71½ —
(For f.o.b N. Y add 2c for tankcars; 2c. for c.l. and 3c for l.c.l non-ret dms.).
Mineral orange, American, bbls., c.l., works lb .16 - —
bbls., l.c.l., same basis lb .17 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal .29 - —
New York gal .305 - —
Houston, Texas gal .25 —
regular tankcars, New Jersey and New York gal .18 —
Group 3 gal .12875- —
Houston, Texas gal .145 —
Mineral spirits, 140 F. flash, New York, New Jersey at terminal gal .205 - —
Houston, Texas gal .17 - —
Mink oil, dms lb 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner kgs., c.l., works lb 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal .13 - .13¼
tanks, New York gal .15½- .16
Molybdated orange bbls. lb .49 —
Molybdenum metal, powd., 80 or 200 mesh ctns., works kilo 7.84 - —
325 mesh, ctns. works kilo 9.13 - —
Molybdenum trioxide purif., dms., works lb 1.15 - —
Tech. chemical dms., works, basis Mo content lb 1.48 - —
Tech. metallurgical, dms., works, basis Mo. content lb 1.47 - —
Molybdic acid, 84%, dms., works, lb 1.05 1.15
Monoallylamine, dms., c.l., dlvd lb 965 - —
dms., c.l., dlvd. lb 995 - —
tanks, dlvd lb 96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb .57½- —
dms., l.c.l., same basis lb .59 - —
tanks, same basis lb .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb .55 - —
dms., l.c.l., works lb .56 - —
tanks, works lb .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid mono).
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E lb .10½- —
dms., l.c.l., same basis lb .11½- —
tanks, same basis lb .08¾ —
Monochlorobenzene prices in the West 1¾c. higher.
Monoethanolamine dms. c.l., dlvd. E lb .27½- —
dms. l.c.l., same basis lb .29 - —
tanks, same basis lb .25 - —
Monoethylalphanaphthylamine (see n-Ethyl-a-naphthylamine).
Monoethylamine 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb .38½- —
dms. l.c.l. dlvd E. 100% basis lb .40 - —
tanks dlvd E. 100% basis lb .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)
Monoisopropanolamine dms., c.l., dlvd. E lb .27½- —
dms., l.c.l. same basis lb .29 - —
tanks, same basis lb .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb .33½- —
dms., l.c.l. same basis lb .35 - —
tanks, same basis lb .31 - —
Monomethylamine, anhyd., cyls., l.c.l. frt equald., 100% basis lb .30 - —
tanks, 100% basis lb .26 - —
30-35% soln., dms., c.l., frt. equald. 100% basis lb .36 - —
Monomethylamine, 30-35% soln., dms., l.c.l., frt equald, 100% basis lb .36½- —
tanks, frt. equald., 100% basis. lb .26 - —
40% soln., dms., frt. equald., 100% basis lb .33 - —
dms., l.c.l., frt. equald., 100% basis lb .33½- —
tanks, frt. equald, 100% basis.lb .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb .31 - —
bgs., l.c.l., dlvd. E lb .32 - —
Monopotassium glutamate, dms., 1,000-lb lots, frt alld lb 3.05 - —
dms 100 lb lots, same basis lb 3.25 - —
Monosodium glutamate, dms., dlvd. lb. 1.07 1.15
Monosodium phosphate (see sodium phosphate, monobasic)
Montan wax, Calif. refd., bgs lb .27 .28
Imp., crude, Bohemian, bgs lb. .25 - .26
German, bgs lb .25 .26
Morphine, cns. 100-oz. f.o.b. works oz.12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b works oz 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b works oz 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b works oz 9.90 —
Morpholine, dms., c.l., dlvd. E lb .55¼- —
dms., l.c.l., dlvd. E lb .56¾- —
tanks, dlvd E lb .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib dms., 100-lb lots lb 4.40 4.90
cns. 25-lb lots lb 4.50 5.00
Ketone fib. dms., 100-lb lots lb 4.60 5.10
cns. 25-lb lots lb 4.70 5.20
Xylol, fib. dms., 100-lb lots lb 1.26 - —
cns. 25-lb lots lb 1.40 - —
Mustard seed, Danish, yellow, bgs. lb .10 - —
Montana, yellow, bgs lb .10½- —
Oriental, bgs. lb .09 - —
Mustard oil, syn., bots lb 1.60 1.85
Myristic acid, bgs lb .23¼- .25¾
tanks lb .22¼- —
Myrrh gum, cs lb .65 .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal .19 - —
Group 3 gal .13875- —
Houston, Texas gal .155 —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb .06¼- .07
imp., 78°, bgs., large lots lb .09½ Nom.
Refd. indust., chipped, crushed, bgs., frt. equald lb .14½- —
tanks, same basis lb .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers bbls., c.l. same basis. lb .15½- —
cs. 50 lbs. c.l. same basis. lb .15¾- —
1-lb pkgs. c.l. same basis. lb .18½- —
a-Naphthol, dms. frt. alld lb 1.02 —
b-Naphthol, tech. flake bbls., c.l., works lb .34 - —
bbls. l.c.l. works lb .36 - —
Naphthol ITR, red toner, bbls. works lb 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid)
1-Naphthol-5-sulfonic 8-amino acid (see S acid)
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms., frt. alld lb .53 - —
b-Naphthylamine tech. flake bbls., works lb 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid)
2-Naphthylamine-1-sulfonic acid (see Tobias acid)
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)
2-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib dms lb 8.50 —
Neatsfoot oil, 15° cold test, dms lb 29 Nom.
20 cold test dms lb. 28 Nom.
30 cold test dms. lb. 27 Nom.
Neocinchophen, USP dms., frt. adjusted lb 7.00 8.00
Neomycin sulfate, fib dms., 1-kilo basis activity gram. .25 —
fib dms. 100-999-gram lots, basis activity gram. .30 —
Tech., fib dms gram. .13½- —
Neopentylglycol dms., c.l., dlvd lb .32 —
dms. l.c.l. same basis lb .33 —
Neroli, dms lb 4.75 —
Neroli oil, NF, French, bots lb.425.00 -575.00
Tunisian, bots lb.400.00 —
Nerolin, cns. lb 2.45 2.85
Neville and Winther's acid, dms., frt alld lb 1.40 —
Niacinamide (see Nicotinamide)
Nickel acetate, bbls., dlvd lb. .68½- .75½
Nickel carbonate, bbls., dlvd lb. 78¼- .85¼
Nickel chloride, bbls. dlvd lb. .37 .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 .73
Nickel metal, electro cathodes, cs., works lb 74 —
Nickel nitrate, dms., frt. alld lb. .31½- .33½
Nickel oxide, black, bbls. lb. .85 —
Green, bbls lb. .84 —
Nickel sulfate, bgs., c.l., dlvd lb. .28 - —
bgs., l.c.l., dlvd lb. .28½- .36
Nicotinamide, USP, 50-kilo, dms., 100 kilos., dlvd kilo. 5.75 - 6.50
dms. less than 100 kilos. dlvd. kilo. 6.25 - 7.00
Nicotinamide hydrochloride, 50 to dms., dlvd kilo. 6.50 - 7.50
Nicotine sulfate 40% dealers, 50-lb. dms frt alld lb 1.20 —
40% manufacturers, 500-lb. dms., frt alld lb 1.05 - —
Nicotinic amide, USP (see Nicotinamide)
Niger seed, bgs lb 10¼- —
Nikethamide, cbys. lb 5.00 —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 —
cbys., l.c.l., works E 100 lbs 6.05 6.85
38° Be., cbys., c.l., works E 100 lbs 6.25 —
cbys., l.c.l., works E 100 lbs 6.55 7.35
Nitric acid, 40° Be., cbys., c.l., works E 100 lbs. 6.75 - —
cbys., l.c.l., works E 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 - —
cbys., l.c.l., works E 100 lbs. 7.55 - 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, l.c.l. works. lb. .20 - —
5-pint bots. extra, cs., c.l., same basis lb. .22½- —
5-pint bots. extra, cs., l.c.l., same basis lb. .24 - .25
dms., frt alld lb. .99 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 - —
Paste, dms., frt. alld., 100% basis.1.10 - —
o-Nitroaniline, flaked, dms, t.l., frt. alld lb. .49 - —
dms., t.l., frt alld lb. .51 - —
o-Nitroaniline orange toner kgs. lb. 1.50 - —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd lb. .44½- —
dms. l.c.l., same basis lb. .46½- —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt alld lb. .72 - —
Nitrobenzene, dbl dist., dms., c.l., frt alld lb. .13 —
dms., l.c.l., frt. alld lb. .14 - —
tanks, frt. alld lb. .12 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .33½- .40½
18-20 cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42½
250-400, 600-1,000 seconds, bbls., l.c.l. same basis lb. .43 - .46
Nitrocellulose, spirit soluble, 30-35 cps. ¼ ½ seconds, bbls., c.l. same basis lb. .43 - —
bbls., l.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds bbls., c.l., same basis lb. .42 —
bbls. l.c.l., same basis lb .43 .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene dms. c.l., frt. alld lb. .15 - —
dms., l.c.l. same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene dms. lb. .26 - .27
2-Nitro-p-cresol tech., dms., dlvd lb .88 —
Nitroethane dms. c.l. dlvd. E lb. .25 - —
dms., l.c.l., dlvd E lb. .26½- —
tanks, dlvd E lb. .22½ —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton. 1.64 - —
Manufacturing type, same basis, unit-ton. 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b Hopewell, Va lb. .065 - —
Cyls. t.l., min 5 tons, same basis lb. .07½- —
Cyls. l.c.l. t.l. same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 5.00
Nitrogenous sewage sludge, bulk, f.o.b Chicago works. unit-ton 3.50 —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane dms. t.l., dlvd. E lb. .25 —
dms t.l. dlvd E lb. .26½ —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms. c.l., frt. alld. lb. .45 - —
dms. l.c.l. frt. alld lb. .47 - —
1-Nitropropane dms. c.l., frt. alld. E of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane dms., c.l., frt. alld. E of Rockies lb. .18½- —
dms. l.c.l. same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c per lb higher
m-Nitrotoluene tech. dms. frt. alld. lb. .50 - —
o-Nitrotoluene, dms. c.l., frt. alld lb. .15 - —
dms. l.c.l. frt alld. lb. .16 - —
tanks, frt alld lb. .13 - —
p-Nitrotoluene tech., cast, dms., c.l., works lb. .27½- —
dms. l.c.l. works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms. l.c.l. works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 —
Nonylphenol, dms. c.l. frt. alld. lb. .22½- —
dms., l.c.l. frt. alld lb. .23½- —
tanks, frt. alld lb. .20 —
Nonylphenol prices on shipments to Western States are 2c. higher
Noscapine, cns. oz. 8.00 - —
Nutmegs East Indian, whole, bgs lb. 1.18 - —
West Indian, bgs lb. 1.20 - —
Nutmeg oil USP dist., East Indian, cns lb. 9.00 -12.00
West Indian, cns. lb. 9.00 -12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .45 - .47
Octane, indust., tanks, Bayonne, N.J gal. .20 —
1-Octanol, tech., dms. c.l., dlvd., Zone 1 lb. .43½- —
dms., l.c.l., dlvd. Zone 1 lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tecn, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms l.c.l. same basis lb. .55 —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., l.c.l., works lb. .23 - —
tanks, works lb. .21½- —
Octylphenol in dms., 1lc. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .15¾- .16
tanks lb. .14¼- .14½
Oleic acid, dbl.-dist. (white), dms. lb. .18¼- .20¼
tanks lb. .15¾- —
S. D., dms lb. .17¼- .19¼
tanks lb. .14¾- —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots. lb. 5.00 7.65
Extra fine, bots. lb. 8.00 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.35 - 2.40
Olivine, crude, works ton.12.00 - —
20 mesh, works ton.15.00 - —
100 mesh works ton.20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis. oz.21.65 - —
powd., cns. 50 lbs., same basis. oz.21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet, cns., dms lb. .60 - —
Florida, cns., dms lb. .40 - .45
Messina, cns. lb. 3.25 5.00
West Indian bitter, cns., dms., lb. 2.50 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb. .28 .30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns. lb. 1.80 2.30
Orris root, Florentine, bls. lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd. bbls. bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Ouabain, USP, bots. gram. 3.00 4.00
Ouricury wax crude, bgs lb. .52 - .54
Refd., pure, bgs lb. .58 - .60
Oxalic acid, bgs., c.l., works lb. .18 —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb higher.
b-Oxynaphthoic acid, pigment manufacture, dms., frt alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

P

Palm oil, clarif., dms lb. .14¾- .15¾
tanks lb. .12 - —
Palm oil acid, double dist., dms. lb. .16 - .18¼
tanks lb. .13½- —
single dist., dms lb. .15½- .18
tanks lb. .13 - —
Palmarosa oil, cns lb. 4.90 - 6.00
Papain, powd. bots. lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz 7.10 - 7.35
Paprika, Bulgarian, bgs lb. .32 - —
Hungarian, bgs. lb. .33 - —
Spanish, bgs lb. .30 - —
Yugoslavian, bgs. lb. .38 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- .0660
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
Paraffin, fully refd., 132°-134°F., ASTM, tanks, refy lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde, 91% flake, bgs., c.l., frt alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91% powd., bgs., c.l. ex whse lb. .1715- —
bgs. l.c.l. ex whse lb. .1865- —
USP-X, fib dms., c.l. lb. .19 - —
fib dms., 1,000-lb. lots lb. .20 - —
fib dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. E lb. .14 - —
55-gal. dms., l.c.l., dlvd. E lb. .15½- —
tanks, dlvd. E lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol)
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol).

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U.S.I. CHEMICAL NEWS

March ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1961

New textured metal coat for polyethylene squeeze bottles comes in range of colors.

Polyethylene Squeeze Bottles Get Metal Coat By New Vacuum Process

A new, modified vacuum-coating process for polyethylene squeeze bottles is claimed to produce adherent, textured metallic finishes in a choice of colors. Coatings applied by the new process are reported to stay on the bottle after many squeezings. The textured effect, which can be varied, is designed to eliminate glare and gaudy appearance, and to hide finger prints or other soiling. This surface takes printing without additional treatment.

Another advantage claimed for the process is that it tends to seal the polyethylene, and slow down the rate at which solvents and volatiles attack it or escape. Tests by the developer are said to indicate no measurable loss of either isopropanol or lube oil after a month in the finished bottles. Nor did these materials cause breakdown of the coated surface.

The process is being recommended for cosmetic containers, toys, etc. and is reported to be competitive on cost with ordinary vacuum metallizing of plastics.

Need for Vitamin E Found To Rise with Intake of Unsaturated Fatty Acids

Recent investigations have been conducted on the relation between unsaturated fatty acids in the diet and the body requirement for tocopherol (vitamin E). Results indicate that, although an intake of 5 mg per day of α-tocopherol may be enough for an adult having low stores of linoleic acid, intake of large amounts of vegetable oil over long periods can up this requirement to 30 mg per day.

MORE

Titanium Now Competes on Cost, For Fabricating CPI Equipment

Market for Titanium Going Up Because of Lower Prices, Stepped-Up National Defense Program

Titanium producers are now bidding for CPI equipment jobs on a cost and performance basis against common construction materials such as lead, copper, stainless steel and special nickel alloys. They believe it is no longer necessary to compete on long life alone, because titanium sponge now sells for $1.60 per pound (against $2.75 in early 1957). Thus, titanium's desirable properties, other than corrosion resistance, are now important sales advantages.

Equally important, fabricators are now more familiar with the working characteristics of the metal. Many of them have developed cost- and trouble-saving techniques for welding and other fabrication operations.

Titanium Heater Coils

For example, a recent report states that titanium heater coils are now being fabricated for sulfuric acid—metallic sulfate service in metals production. Here, titanium's ability to shed corrosion products, rather than its corrosion resistance, was the reason for its selection. In this environment, corrosion products evidently build up on coils and cut heat transfer rate. In contrast to the material previously used for these coils, the titanium is said to shed corrosion products when tanks are simply flushed with boiling water. No scrapping, chipping, or brushing is needed.

MORE

Typical CPI application for titanium is this caustic scrubber column (16 in. diam., 23 ft. long). Photo courtesy Pfaudler Permutit, Inc.

Fuel Cell Being Developed Uses Sodium, Oxygen, H_2O

According to recent reports, sodium metal is being used to fuel a new type of cell for the production of electric power. Such cells are being incorporated into a power plant prototype now under development for the Navy.

Employing the reaction of sodium with oxygen and water, these cells are claimed to have an efficiency of 60%—much higher than hydrogen—or hydrocarbon-burning cells. It is reported that they develop almost twice the voltage and current density of the hydrogen-burning cells, so that fewer cells can do the same job. Also the sodium, which is in the form of an amalgam, is easier to store than is hydrogen.

The cells weigh 2-3 lbs./kwh of capacity, including fuel storage, which is said to be only 1/30 the weight of lead-acid storage batteries of equivalent power output (75kw).

Black Polyethylene Resin Now Offered for Coatings

Black pigmented polyethylene resin for extrusion coating onto paper, paperboard or aluminum foil has just been introduced by U.S.I. This resin is expected to find application in products such as automobile door liners, agricultural mulch-coated paper and packages for photographic film or paper.

Coatings 0.75 mil (19 microns) or greater made from PETROTHENE® 201-220 polyethylene resin provide an effective light and moisture barrier. Good carbon black dispersion and the absence of non-homogeneous particles also contribute to the light-tight barrier properties of the resin. Adhesion onto paper or paperboard is excellent. For coating aluminum foil, a primer is necessary for good adhesion.

For literature on this resin, address Technical Literature Dept., U.S.I. Chemical News, 99 Park Ave., New York 16, New York.

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March ★ **U.S.I. CHEMICAL NEWS** ★ 1961

CONTINUED *Titanium*

A prototype titanium coil has already lasted three years in service, and is still in excellent condition, according to the report. The material previously employed lasted only nine months before corrosion build-up made it unusable.

Titanium for Defense

Thanks to the above factors, plus a stepped-up national defense program, the market for titanium has been going up. Production and sales in 1960 are estimated at over 7 million pounds, according to Reactive Metals—the integrated titanium producer owned in part by U.S.I.'s parent company, National Distillers.

Titanium weighs only about 55% as much as steel; is impervious to corrosion from salt water or acids. Some titanium alloys retain their integrity at temperatures up to 2,000°F. for short periods. That's why large quantities of the metal are going into the B-70 bomber program; into the Army's "Davy Crockett" program for equipping foot soldiers with a lightweight automatic weapon; into space vehicles and missiles; and into jet engines.

CONTINUED *Vitamin E*

Prior to study, experimenters reasoned from two facts that dietary tocopherol needs might be proportional to fatty acid levels in the diet. The facts were: tocopherol acts as an antioxidant in normal tissues; unsaturated fatty acids, incorporated into depot fat as a result of high intake, increases the susceptibility of the fat to autooxidation.

Studies with both animals and humans have supported this reasoning, it is reported. In consequence, the researchers feel that those who advise supplementing the diet with vegetable oils should also provide for greater intake of tocopherol.

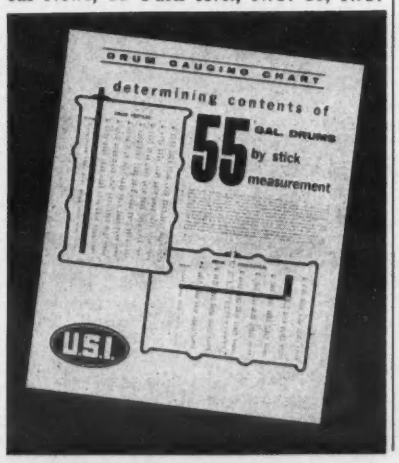
Have You a New Product To Tell the World About?

Make it routine to send your publicity releases on new products and developments to the Editor of U.S.I. Chemical News, often called the "Front Page of the Chemical Process Industries."

New Drum Gauging Chart Offered by U.S.I.

A new drum gauging chart, for determining how much liquid is left in an open drum, is now available from U.S.I. The new wall chart covers both 30- and 55-gallon drums. It converts wet inches of stick measurement to gallons of liquid—for drums gauged horizontally or vertically—at temperatures from 30°F. to 90°F. The chart is designed specifically for gauging ethyl alcohol, but can be used for any liquid with a similar coefficient of cubic expansion.

Copies may be obtained by addressing Technical Literature Dept., U.S.I. Chemical News, 99 Park Ave., N.Y. 16, N.Y.



TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

Reagents and dye solutions for paper chromatography and electrophoresis now available in 200 ml aerosol spray bottles. Frees operator from dependence on air pressure lines. Protects reagents against contamination. **No. 1690**

Complete line of first aid kits and pharmaceutical supplies for industrial, institutional or professional use is described and illustrated in new, 28-page catalog now offered. **No. 1691**

Butyl myristate, butyl palmitate, butyl stearate now offered in 99.8+% purity. Because of high purity, these fatty acid derivatives are claimed useful as gas chromatography standards. Vapor phase chromatograms available for all 3. **No. 1692**

New particle counter is self-contained instrument said to be useful both for research work, and for monitoring particulate matter in atmospheres of such areas as clean rooms for precision manufacture and assembly. **No. 1693**

Lithium aluminum tri-t-butoxy hydride, new complex hydride that reduces acid chlorides to aldehydes, now available in lab quantities. Also useful for stereospecific reductions of steroid ketones to hydroxy derivatives. **No. 1694**

Amino acid analyzer described in new brochure. Gives features and use of instrument for automatic analysis of protein and peptide hydrolyzates, physiological fluids, tissue extracts, foods, culture media, pharmaceuticals. **No. 1695**

New fatty hydroxamic acids, now produced commercially as chemical intermediates, have reactive OH and NH group as well as long, straight chain fatty group. Can react with alkalis, metallic ions, acylating agents. **No. 1696**

Mathematical puzzles and pastimes are subject of book now being sold. Puzzles based on match-stick geometry, "once-over" curves, perpetual calendar, etc. Includes 100s of puzzles, answers, explanations, current applications. **No. 1697**

New iodine titration indicator is said to be stable, with good shelf life, and to be readily soluble in cold water, giving clear colorless solution. Reacts with iodine in presence of iodide, forming deep blue complex. **No. 1698**

Radioactive tracers, tagged compounds, sources, handling equipment, instruments, film badge service, health physics survey, environmental testing described in new catalog now offered. **No. 1699**

PRODUCTS OF U.S.I.

PETROTHENE® . . . Polyethylene Resins

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Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Urethan USP, Intermediates.

Ethyl Alcohol: Pure and all denatured formulas; Anhydrous and Regular Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL®M, ANSOL PR

Heavy Chemicals: Metallic Sodium, Anhydrous Ammonia, Ammonium Nitrate, Nitric Acid, Nitrogen Fertilizer Solutions, Phosphatic Fertilizer Solution, Sulfuric Acid, Caustic Soda, Chlorine, Sodium Peroxide.

Animal Feed Products: DL-Methionine, MOREA® Premix (to authorized mixer-distributors).

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Parathion, ethyl, dms., frt. alld lb. .54 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls. lb. .35 .40
Patchouli oil, imp., cns. lb. 5.60 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb. 1.00 —
Peacock blue price 1c. higher W of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b., mills ton 57.50 - —
solvent, same basis ton 55.00 - —
Peanut oil, crude, tanks, f.o.b. mills lb. .14 - —
Refd., dms. lb. .19 - .19¼
tanks lb. .17¼ - —
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt. pt kilo. 4.52 - —
Pelargonic acid, dms., c.l., dlvd lb. .25 — —
ton lots, same basis lb. .27½ - —
tanks, same basis lb. .23½ - —
Penicillin, potassium, cryst., bulk, 1,000,000 units .018 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units .020 - —
Pennyroyal oil USP imported, cns. lb 1.95 2.70
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb. .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½ - —
Pentachlorophenol in dms 1c. higher
Pentaerythritol tech. bgs., c.l., dlvd lb .31 —
bgs. t.c.l., dlvd lb .32 —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane indust. tanks f.ex refy gal. 14 - —
Pentobarbital dms. 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs. lb. .48 - —
Lampong, bgs. lb. .48 - —
Red, Funtuas bgs. lb. .32 — —
Japanese Hontoka, bgs. lb .37½ - —
Santaka, bgs. lb. .31½ - —
Sudanese, bgs. lb. .36 — —
White, Muntok, bgs. lb. .71 - —
Peppermint leaves, dom., USP, bls., dms lb. No stocks.
imp., USP, dms. lb. .85 - .90
Peppermint oil, nat., dms. lb. 4.90 - 5.25
Redist., USP, dms lb. 5.50 - —
Perchloroethylene dms. c.l., or t.l., dlvd lb. .13½ - —
dms., t.c.l., dlvd. lb. .15¼ - —
tanks, dlvd. lb. .11¾ - —
tanktruck, 1,000 gal. min. dlvd lb. .12¼ - —
Peri acid, dry bbls., frt. alld lb. 1.60 — —
Paste, bbls. frt alld lb. 1.55 - —
Peru balsam, dms lb. 1.15 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil South American, cns., dms lb. 2.30 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125 - —
dms., t.c.l., dlvd. lb. .10125 - .11375
tanks, refy. lb. .05875 - —
Extra amber, dms., c.l., refy lb. .07125 - —
dms., t.c.l., dlvd. lb. .09125 - .10375
tanks, refy. lb. .04875 - —
Petrolatum, lily white, dms., c.l., refy lb. .08625 - —
dms., t.c.l., dlvd. lb. .10625 - .12
tanks, refy lb. .06735 - —
Petrolatum, USP, snow white, dms., c.l., refy lb. .09125 - —
dms., t.c.l., dlvd lb. .11125 - .125
tanks, refy. lb. .06875 - —
Petrolatum, USP, soft yellow, dms., c.l., refy lb .07125 - —
dms., t.c.l., dlvd. lb .095 - .10375
tanks, refy lb .04875 - —
Petroleum pitch (see Asphalt, petroleum)

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l., works. lb. .16½ - .18¾
non-ret dms., t.c.l., works lb. .17½ - .19
tanks, works lb. .14½ - .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., t.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine dms., c.l., frt. alld. E lb .91 - —
dms., t.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms. same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret dms., frt. alld. E. of Rockies lb. .17¾ - —
non-ret dms. t.c.l., same basis. lb. .18¾ - —
tanks, same basis lb. .15¾ - —
Phenol, 82-84% (cresol 16-18%) non-ret. dms., c.l., same basis. lb. .17½ - —
non-ret dms. t.c.l., same basis. lb. .18½ - —
tanks, same basis lb. .15½ - —
Phenol, 39°C., or above, tar dist., non-ret. dms., c.l., same basis. lb. .19 - —
39°C., or above, tar dist., non-ret. dms., t.c.l. lb. .20 - —
tanks, same basis lb. .17 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .19½ - —
dms., t.c.l., same basis lb. .21½ - —
tanks, same basis lb. .17½ - —
Phenolphthalein, USP or yellow, 250-lb dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb. 1.35 - —
Phenothiazine drench, fib dms., t.l., dlvd lb. .46 - —
fib. dms., ton lots, dlvd lb. .49 - —
NF, fib. dms., t.l., dlvd lb. .45 - —
fib. dms., ton lots, dlvd lb. .48 - —
Phenyl acetate, dms., 100-lb. lots, works lb .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots lb. 2.15 - 2.35
100%, bots. lb. 3.80 4.00
Phenylacetic acid, pure, cryst., cns lb. 1.25 1.75
dl-Phenylalanine, dms., 1-kilo kilo. 65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms., 200-lb. lots, dlvd. E lb. 3.45 - —
fib dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .50 - —
dms., t.c.l., dlvd. E lb. .51½ - —
tanks, dlvd. E lb. .47½ - —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
t.c.l., t.t.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi, fib. dms. 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms. works lb 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .73½ - —
dms., t.c.l., same basis lb. .76¼ - —
Phenylethyl acetate, bots. lb. 1.25 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 1.50
Standard, dms. lb. 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 —
dms., smaller lots, frt. alld lb. 1.70 1.85
Phenylethylphenyl acetate, bots lb. 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms. lb 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E. lb. 1.80 - —
fib. dms., smaller lots, dlvd E lb 2.10 - —
o-Phenylphenol, dms., t.c.l., works. lb. .48 .50
p-Phenylphenol, bgs., c.l., works lb. .38½ - —
bgs., t.c.l., works lb. .43 — —
Philippine copal gum, pale, chips, bgs lb. .23¾ .26
nubs, bgs. lb. .33¼ - .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 .24
Phloroglucinol, comi., fib dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½ - —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 46.50 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 4.989 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 6.438

Parathion—Phthalocyanine Green Toner

Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, 74-75%, b.p.l., bulk, c.l., same basis. short ton. 7.329 - 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.219 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64.
Phosphoric acid, food grade, 75%, cbys. c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., t.c.l., same basis 100 lbs. 7.25 7.75
tanks, t.w., works 100 lbs. 5.60 —
80%, cbys., c.l., frt. equald 100 lbs. 7.85 —
cbys., t.c.l., works 100 lbs. 8.10 9.35
tanks, t.w., works 100 lbs. 6.00 —
NF 85%, cbys., c.l., works. 100 lbs. 8.50 —
cbys., t.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs. 6.65 —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 .20½
dms., t.c.l., works, frt. equald lb. .21½ - —
tanks, works, frt. equald lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½ - —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½ —
dms., t.c.l., works lb. .14½ .15½
Solid, dms., c.l., works lb. .11½ —
dms. t.c.l., works lb .12½ 13½
Phosphorus pentoxide, dms., c.l., works lb. .1375 .1475
dms., t.c.l., works lb. .1475 .1673
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 —
dms., t.c.l., works lb .39 .40
Phosphorus trichloride, dms., c.l., works lb. .14 —
dms., t.c.l., works lb. .15 —
tanks, works lb .12½ - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .20 - —
bgs., t.c.l., same basis lb. .21 - —
tanks, same bsais lb. .19½ - —
Phthalimide, 97-98%, dms., frt. alld lb. .65 —
Phthalocyanine blue, full strength, bbls. dlvd E. of Rockies. lb 2.90 —
Resinated, bbls., same basis lb. 2.75 —
Water dispersable, bbls., same basis lb 1.52 —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 —
Water dispersable, bbls. lb. 1.71 —
Phthalocyanine green prices 1c. higher W. of Rockies.

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Phthalylsulfacetamide, fib. dms., 1-000-lb lots or more lb 5.00 - —
NF fib dms. lb 5.20 - —
a-Picoline dms. c.l. works, frt equald lb .46 .48
dms., t.c.l., works, frt equald lb .46½ .49
tanks, same basis lb .43 .46
b-Picoline 98% dms. t.l. works lb 1.05 -
dms., t.c.l. same basis lb 1.15 - —
tanks, same basis lb .95 - —
b,g-Picoline 5°C dms. c.l. works. lb 32½- —
dms. t.c.l. works lb 33 - —
g-Picoline dms. t.o.b., works lb 1.60 - —
tanks t.l. same basis lb 1.50 - —
Picric acid, NF bbls. lb .85 - —
Tech bbls lb .44 - —
Piment green B, kgs lb 1.55 - —
Pilocarpine hydrochloride, USP, bots oz 4.75 - 5.25
Pilocarpine nitrate USP bots., vials oz 4.65 5.15
Pimento, Jamaican, bgs lb .54 - —
Mexican, bgs lb .56 - —
Pimento berry oil, NF, dms. lb 8.75 9.25
Pimento leaf oil, crude, cns lb 2.50 - 2.60
Pine oil, dest-dist dms., t.c.l. works lb 15 —
dms. t.c.l ex whse New York lb 173 —
Steam-dist dms. ex whse New York lb 185 —
dms. dlvd lb 188 —
Pineneedle oil, Siberian (see Abies Sibirica oil).
Pink root, bls. lb 2.25 - —
Piperazine anhyd. dms. c.l., frt alld. E lb 1.80 - —
dms., t.c.l., frt alld. E lb 1.85 - —
Piperazine citrate, 36% dms., 1,000 lbs. or more, frt. alld lb 1.33 - —
Piperazine dihydrochloride 51% dms 1,000 lbs or more fr. alld lb 1.29 - —
Piperazine hexahydrate 44% dms., 1,000 lbs. or more, fr. alld lb .90 - —
dms., 200-900 lbs., frt. alld lb .93 - —
Piperazine phosphate, 42% dms., 1,000 lbs or more, frt. alld lb 1.11 - —
Piperidine, dist., 98% min., 5 dms or more, t.c.l., t.t.l., f.o.b. works lb 2.65 - —
1-4 dms., same basis lb 2.70 - —
dms., c.l., t.l., frt. equald lb 2.55 - —
Piperonyl butoxide dms. dlvd E lb 4.50 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works oz 81.00 -85.00
Pleurisy root bls lb .45 .50
Podophyllum resin, NF, dms lb 12.50 15.50
Poke root bls lb .19 .22
Polymyxin bots., bulk., 50 billion units or more 1,000,000 units 52 —
bulk bots., 25-50 billion units. 1,000,000 units. 54 —
bulk bots. 1-25 billion units. 1,000,000 units. 56 —
Polyoxyethylene sorbitan monostearate dms., 20,000-lb. lots, works lb 42 —
dms. 10,000-20,000-lb lots. works lb 44 —
dms. smaller lots. works lb 47 49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works lb 42 —
dms. 10,000-20,000-lb lots, works lb 44 —
dms. smaller lots. works lb 47 49
Pontianak copal gum, chips, bgs lb. .23½ .26
Nubs, bgs. lb. .38 .44
Poppy seed, Argentine, bgs. lb No stocks.
Dutch, bgs. lb. .14 - —
Danish, bgs. lb. .14 - —
Polish, bgs. lb. .13 - —
Turkish, bgs. lb. .11 - —
Potash caustic, liq. 45% basis, dms., c.l., works 100 lbs 4.25 —
dms., t.c.l., same basis 100 lbs 5.25 - —
tanks, same basis 100 lbs 3.70 - —
reg., flake 88-92% dms., c.l., same basis 100 lbs 9.55 —
Potash, reg., flake, 88-92%, dms., t.c.l., same basis 100 lbs. 11.05 - —
solid 88-92% dms., c.l., works 100 lbs 9.10 - —
dms. t.c.l., works 100 lbs 10.60 - —
Potassium acetate, NF, 200-lb dm, f.o.b works, E lb 31 —
Potassium bicarbonate, USP, gran dms lb 22 - —
powd. dms lb 24 —
Potassium bichromate, gran., bgs., c.l. t.l., works lb 18 —
bgs. t.c.l. works lb 18½ 19¼
Potassium bichromate in dms ¾c higher
Potassium bitartrate, NF, gran., powd., 100-lb bgs., c.l., frt equald lb .37 —
100-lb bgs. 5,000 lbs. 1 shipt., same basis lb .38 —
100-lb bgs. smaller lots, same basis lb .40 —
Potassium borohydride, powd., dms., works lb 16.00 - 22.00
Pelletized potassium borohydride $1.25 per lb higher in 1,000-lb lots
Potassium bromate, 200-lb. dms., c.l., frt alld lb .49 - —
Potassium bromide, USP gran., bbls., kgs lb .39 .40
Potassium carbonate, dom., NF, gran., bbls., cms lb .22 - .24
Dom tech. powd., bbls., dms lb .21 .22
Dom. calcinated, bgs. c.l. works 100 lbs. 8.50 —
bgs. t.c.l. same basis 100 lbs 9.55 —
Dom. hydrated, 83-85%, bgs., c.l., works 100 lbs 7.10 —
bgs. t.c.l. works 100 lbs 8.15 —
Potassium chlorate cryst. dms., c.l., works lb .12¼ —
dms. t.c.l., works lb .13½ .14½
Powd. dms., c.l., works lb .12¾ —
dms. t.c.l. works lb .14 .15
works lb .12¼ —
Potassium chlorate, NF cryst., dms. 2,000 lbs or more, works lb .16¾ —
NF gran. 25-lb metal dms lb .36 —
NF powd. dms., 2,000 lbs or more works lb .17¼ —
Potassium chloride indust. 99.9% KCL, bulk, c.l. works ton 29.00 —
bgs., c.l., works 30 —
99.3% KCL, bulk, c.l., works ton 28.00 - —
bgs., c.l., works 30.00 —
USP, cryst., dms lb .17 - —
USP gran, dms. lb .21 .23
USP powd. dms. lb .24 .26
Potassium chloride agricultural (see Potassium muriate)
Potassium chromate, tech., dms., works lb .50 .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd. 250-lb dms. same basis lb. .46 - —
Potassium cyanide dms. 20,000-lb. lots or more works lb 42½ —
dms. 2,000-19,999-lb lots works. lb. .43 —
dms. smaller lots, works lb .44 .44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide dms., ton lots, works lb .50 —
dms. smaller lots works lb. .65 —
Potassium ferrocyanide dms., ton lots lb 24½- —
dms. smaller lots lb 29 —
Potassium fluoborate fib dms., c.l., works lb .30 —
fib dms. t.c.l. works lb .31 —
Potassium fluoride, dms., works lb .36 .37
Potassium gluconate, 100-lb dm, f.o.b works E lb 1.67 —
Potassium guaiacol sulfonate, NF dms lb 2.10 2.30
Potassium hydroxide tech (see Potash caustic)
Potassium hydroxide, USP, pellets, 100-lb dms, 1 to 100-dm lots lb 33½ .38
Potassium hypophosphite, NF fib dms 1,000 lb lots lb 1.38 —
Potassium iodide, USP cryst. gran., dms. 500-lb., f.o.b works, E lb 1.55 - —
Potassium manure salt, min 20% K_2O bulk, c.l., works, unit-ton 17 .1765
Potassium metabisulfite gran dms., lb .16 —
Powd. dms lb .27 —
Potassium muriate, standard, bulk, c.l., works, unit-ton .37½- .39½
bagged 60% minimum K_2O, same basis ton 26.60- 27.80
Gran., bulk, c.l., works, unit-ton .38½- .40½
bagged 60% minimum K_2O, same basis ton 28.10 -30.10
Inside prices apply to material contracted for prior to July 1, 1960
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF cryst., bbls., 20-ton lots 100 lbs 17.00 —
bbls smaller lots 100 lbs 18.00 19.00
gran. bgs. 20-ton lots 100 lbs 9.50 —
bgs. smaller lots 100 lbs. 11.00 12.00
powd. bgs 20-ton lots 100 lbs. 10.50 —
bgs. smaller lots 100 lbs 12.00 13.00
Potassium oxalate, neutral, tech., fine gran powd., 300-lb. dm, f.o.b works E lb 32 —
Potassium pentaborate gran. dms. c.l. works ton 219.50 —
dms., ton lots ex whse 100 lbs. 17.48 - —
dms., smaller lots, ex whse 100 lbs. 18.73 - —
Powdered potassium pentaborate $10 per ton higher
Potassium perchlorate dms., c.l., works lb 18½ —
dms. t.c.l works lb 19 20
Potassium permanganate comml., kgs. works lb .25 .33
USP dms works lb 29 35
Potassium persulfate dms., c.l., works lb. .17½ —
dms. t.c.l. works lb. 18 21
Potassium pyrophosphate, tetrabasic, dms., works lb .1475- 1575
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferro-cyanide)
Potassium silicate electrical grade, 30° Be 1:2.0, dms., c.l., works 100 lbs 6.50 —
dms. t.c.l. 5 dm lots or more works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 —
Potassium silicate electrical grade, 40.5° Be 1:2.1 dms., c.l., works 100 lbs 5.95 —
dms. t.c.l. 5 dm. lots or more, works 100 lbs 6.70 - —
tanks works 100 lbs 5.60 —
Potassium silicate, glass grade, ngs., c.l., works 100 lbs. 17.30 18.00
bgs. t.c.l works 100 lbs 17.80 —
Soln. 29° Be 1:2.5, dms., c.l. works 100 lbs 4.95 —
dms. t.c.l., 5-dm lots or more, works 100 lbs 5.70 - —
tanks, works 100 lbs 4.60 —
Potassium silicofluoride, bgs. works lb .09½ .10
Potassium silicofluoride in drums, 0.4c per lb higher
Potassium stannate dms. frt. alld. lb. .789 - .861
Potassium sulfate, min 50% K_2O, agricultural, bulk, c.l., works, unit-ton .70½- .72½
Inside price applies to tonnage contracted for prior to July 1, 1960
Outside price applies to tonnage contracted for after that date but also for delivery during the current month
Potassium sulfate NF VII, cryst., dms. lb 31 .33
NF VII, gran. 400-lb. dm lb. .18 —
NF VII powd. 400-lb dm lb. .17 - —
Potassium sulfocyanate NF cryst., (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms., works lb. .96 .98
Tech. dms. works lb. 77 79
Potassium titanate ctns. c.l., works. lb. .16¼ —
ctns. 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾ —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk works, base price. ton 13.45 - —
bulk, works, July forward ton 14.00 - —
Potassium-sodium tartrate, NF gran or powd., 250-lb dms., c.l., works E lb. 42½- —
250-lb dms. 5,000-lb lots, same basis lb. .43 —
250-lb dms. same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 .40
Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 —
fib dms., t.c.l. works lb. .52½- .55
Pregnenolone, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride USP antibiotic grade dms., 2,000-lb lots, frt alld lb 2.25 —
Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb 2.40 - —
dms. 500 lbs lb 2.45 - —
dms. 100 lbs lb 2.50 - —
Progesterone, USP, bots. gram. No prices.
Pregnenolone acetate, bots gram. No prices.
Propenyl guaethol dms lb. 24.30 27.00
b-Propriolactone, tech., dms., c.l., f.o.b. works lb. .47½- —
dms., t.c.l., t.t.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Propionic acid syn. pure, dms., c.l., dlvd lb. .23¼- —
dms., t.c.l., dlvd. lb. .24¾- —
tanks, dlvd. lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾ —
dms., t.c.l., dlvd lb. .16¼- —
tanks, dlvd lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb .14 .15
dms. t.c.l., dlvd lb. .15½ 16½
tanks, dlvd lb. 11½ 12½
n-Propyl gallate, dms., 100 to 2,000-lb lots works lb 3.90 4.40
n-Propyl-p-hyroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil bots., 50 kilo lots or more kilo 55.00 —
bots. smaller lots kilo 55.10 -55.30
n-Propylamine dms. c.l., dlvd lb 1.24 —
dms t.c.l same basis lb 1.255 —
n-Propylene dichloride consumers, dms. c.l. dlvd E lb .0845- —
dms. t.c.l. same basis lb .0995- —
tanks same basis lb .07 —
Propylene dichloride prices in West te. higher same basis
Propylene glycol indust., dms., c.l., dlvd E lb .15 —
dms. t.c.l., same basis lb .16¾- —
tanks, same basis lb. .12½ —
USP dms. c.l., dlvd E lb .17 —
dms t.c.l. same basis lb .18¾ —
tanks, same basis lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 —
dms., t.c.l. same basis lb .21 —
tanks, same basis lb. 18½- —
Propylene oxide dms., c.l., dlvd E. lb. .17 —
dms. t.c.l., dlvd E lb. 18½- —
tanks dlvd E lb. 14½ —
Psyllium seed, black, bgs. lb. .38 .40
Blonde bgs lb. 18 20
Husks, bgs lb. 42 45
Pumice dom., grd. coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03½ 04¼
bgs., smaller lots lb. .03¾- —
Imp. Italian silk-screen, coarse, bgs. ton lots lb 06½- —
fine, bgs. ton lots lb 04 —
sun dried, coarse, bgs ton 60.00 —
fine bgs ton 60.00 70.00
Pumpkin seed, ngs lb .25 .26
Pyrethrins, syn (see Allethrin)
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd. 1.3% pyrethrins, bgs., ton works lb .71 - —
Pyrethrum liquid, 20-1 basis (2 grams pyrethrins per 100cc odorless base) dms. works gal 9.60 9.80
Pyrethrum liquid 100-1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal. 45.90 46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb. 11.00 11.35
purit. 20% dms. works lb. 11.00 11.35
Pyridine denat. dms. c.l. works and frt. equald gal. 2.77 —
dms. t.c.l., same basis gal. 2.80 - —
Reid. 2" non-ret dms., c.l., same basis lb. .75½- —
dms., t.c.l., same basis lb. .76 - 76½
tanks, same basis lb .71 - —
Pyridoxine hydrochloride, USP 500-gram bots. dms., f.o.b works kilo 95.00 -100.00
Pyrites, Canadian 48-50% S, mines, long-ton 4.50 5.00
Pyrocatechol (see Catechol)
Pyrogallic acid NF (see Pyrogallol)
Pyrogallic acid tech. bbls., 100-lbs., f.o.b. works lb 3.50 —
Pyrogallol NF 100-lb dms lb 3.00 —
Pyroxylin USP bots lb 9.50 —

Q

Quassia chips lb. .10 —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.75 - 2.00
Quinidine sulfate, USP, 1,000-oz. dm oz. 74½ —
Quinine, NF, 1,000-oz. dm. oz. .3750- —
Quinine bisulfate USP 1,000-oz dm. oz. .28 —
Quinine hydrochloride, 1,000-oz dm. oz. .3650- —
Quinine sulfate USP, 1,000-oz dm. oz. .3150- —
Quinoline dms. c.l. frt. equald lb. 50¾ —
dms., t.c.l., same basis lb. .51¼ —
tanks, same basis lb. .50 —

R

R salt paste, dms., frt alld., 100% basis lb .98 - —
Powd., frt alld. 100% basis lb 1.08 - —
Rapeseed oil, dms lb. .18 - .18½
tanks lb. .16¼- —
Rare earth oxalate, NF, 45-50%, bgs, works lb 1.15 —
Rauwolfia serpentina root, powd., bbls, dms lb 1.00 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS

Red pigment quotations are listed individually For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

Red precipitate (see Mercuric oxide, red)
Red toner, Lake C, alizanine, bbls., works lb. 1.30 - —
Reserpine, cryst. bots gram. 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt. equald lb. 77½- —
bgs., t.c.l., same basis lb. 78½- —
Resorcinol in dms., 1c. per lb. more.
USP, powd., dms., works lb 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs. works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb cans lb. 42.00 -51.00
Synthetic lb. 14.00 -16.00
Rhubarb root, India, whole, bgs lb .25 —
powd. bgs lb 35 - —
Riboflavin USP fib dms., kilo or more, dlvd kilo. 36.00 - —
Riboflavin, 5-phosphate-sodium fib dms. kilo or more, dlvd. kilo. 104.50 - —
Rice bran oil, clarified, dms., t.c.l. lb. .14 .14½
tanks, dlvd E lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split)
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat., Bulgarian, bots lb 1,152.00 —
Turkish, bots lb. 560.00 -750.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 1.40
Spanish, tech., cns., dms lb. .50 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .10½- —
Resin, 25-45% fib dms. works, unit-lb. .10½- —
Rottenstone, bgs. 5-ton lots, ex-whse lb. .03¾ —
bgs. ton lots, same basis lb. .04½- —
Rubber solvent petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 —
Group 3 gal. .13875 —
Houston Texas gal. .155 —
Rue oil, bots lb. 2.75 3.00
Rutin NF fib dms. 10 kilo lots. kilo. 11.00 - —
fib. dms., 5 kilo lots kilo. 11.50 - —
fib. dms., 1 kilo kilo. 13.00 - —
Ryania 100% powd. bgs., c.l., works lb. .22 - —
bgs., t.c.l. same basis lb. .24 - —

S

S acid, bbls. works lb. 3.25 - —
Sabadilla seed activated, ground with lime bbls lb .42 .44
Saccharin calcium, fib dms. 1,000-lb lots, works lb 2.50 —
Saccharin, USP, gran., soluble, dms., 1,000-lb. lots lb. 1.50 - —
dms., smaller lots lb. 1.60 - —
USP, powd., soluble, dms., 1,000-lb. lots lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.65 - —
dms., smaller lots lb. 1.53 - —
dms., smaller lots lb. 1.63 - —
Safflower oil, dms., New York lb. .1795- .1820
tanks, Atl., coast lb. .1795- .1620
Saffron Mancha Superior, tins lb. 19.50 - —
Safrol dms lb 65 - —
Sage Dalmatian, bgs lb 40 - —
Greek, cns lb 15 - —
Italian cns lb 18 —
Sage oil, clary, bots lb. 12.00 -15.00
Dalmatian cns lb 2.65 3.25
Spanish cns lb 1.25 1.75
Sal soda (see Soda sal)
Salicylaldehyde dms c.l., t.l., f.o.b. plant frt equald lb 1.23 —
dms t.c.l. same basis lb 1.25 —
Salicylamide, 100-lb dms lb 1.05 —
Salicylic acid tech, fib dms., c.l., t.l., dlvd lb. 40½- —
fib dms. t.c.l. dlvd lb. 44¾- —
Salicylic acid USP, cryst 200-lb. fib dms., 1,000 lbs or more lb. .51¾ —
200-lb fib dms less than 1,000 lbs lb. .54¾ —
Salicylic acid, cryst., 100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb fib dms less than 1,000 lbs lb. .56¾- —
USP powd. 100-lb fib dms., 1,000 lbs or more lb. .58¾- —
100-lb fib dms less than 1,000 lbs lb. .61¾- —
Saloi, NF gran. bbls. kgs lb 1.20 —
Powdered saloi 25c per lb higher.
Salt rock paper bgs. c.l. 100 lbs 1.09 - —
Salt table vacuum common, fine, paper bgs. c.l. 100 lbs 1.34 - —
Saltcake, dom bulk, works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood E Indian chips bgs., lb 55 .66
powd fib dms lb 75 .76
Sandalwood oil, cns lb. 26.00 -30.00
Sarcosine tech. tanks, f.o.b. works, frt equald lb 1.03 —
lb No stocks.
Sassafras oil, artif., dms lb. 65 —
Nat., dom dms lb 1.40 —
Savory oil cns lb 4.75 —
Schaeffer's salt paste, dms., frt alld 100% basis lb .85 - —
Powd. bgs. frt alld 100% basis. lb .95 - —
Scopolamine hydrobromide, USP bots oz. 13.00 —
Sebacic acid, CP bgs. c.l. works lb. .69½- —
bgs. t.c.l. works lb. 71½- —
Purified, bgs c.l., works lb. .65½- —
bgs. t.c.l. works lb. .67½- —
Seidlitz mixture fib dms. 5,000-lb. lots lb. .30½- —
fib dms., smaller lots lb. .31 .33
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls lb. .28 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 6.50 - —
Sesame oil, USP, dms., t.c.l lb. .37 - .38
Sesame seed Colombian, ngs lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .21 - —
nat., bgs. lb. .15 - —
Salvadorian, Nat. bgs lb. .16 - —
Shellac bleached bonedry bgs., 1,500-lb. lots lb. .47 - —
dms., t.c.l. works lb .22 .23¼
bbls., 1,500-lb. lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c per lb higher for all packages.
Shellac bleached, refd. bgs., 1,500-lb lots lb. .56 - —
bbls., 1,500-lb lots lb. .57 - —
kgs., 1,500-lb lots lb. .58 - —
Shellac orange lemon No 1, bgs., 10-bg lots lb. .37 .39
lemon No 2, bgs. 10-bg lots, lb. .34 .37
superfine, bgs. 10-bg lots lb. .32 .34
Shellac in 1 to 10-bg lots 1c. per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18¼
paper bgs. t.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs. t.c.l. works lb. .07 .17
Silica, amorph. dry-grd. 325 mesh, bgs., c.l., works ton 25.00 —
bgs. t.c.l. works ex whse ton 45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton 20.00 - —
bgs., t.c.l., works ton 25.00 - —
99½% 140 mesh bgs., c.l. works ton 15.00 - —
bgs. t.c.l. works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, cs Troy oz. .91¼- —
Silver cyanide bots. 1,000-oz. lots, oz. .94¾- —
bots. 500-oz. lots oz. .95¼- —
bots., 100-oz lots oz. .96¼- —
Silver nitrate, CP cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots. 250-500 oz. same basis, oz. 67¼- —
USP granular silver nitrate 4c per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots oz 1.46 —
Snakeroot oil, Canada, cns lb. 40.00 -43.00

Soapbark, crushed, bls. lb. .20 - .25
Powd., bls. lb. .35 - .40
Whole, bls. lb. .20 - .25

Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 4.77
bulk, c.l. works 100 lbs 1.60 —

Soda ash, light, 58%, paper bgs., c.l., works 100 lbs 1.85 —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 4.72
bulk, c.l., works 100 lbs 1.55 —

Soda caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs 5.20 —
liq. 50% sellers tanks works, dry basis 100 lbs 2.90 —
50%, rayon type, sellers tanks works, dry basis 100 lbs 2.90 3.00

Soda, caustic, liq. 73%, sellers tanks works dry basis, 100 lbs. 3.00 —
liq. 73% rayon type, sellers tanks, works, dry basis lb 3.00 3.10
solid 76% dms. c.l. works, 100 lbs 4.80 —

Soda sal. conc. bgs. c.l. works 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs 2.80 - —

Sodium acetate anhyd., bgs., c.l., dlvd. E lb. .14½- —
bgs., l.c.l., same basis lb. .16½- —
NF 90% gran. dms. c.l. works, lb. .15½ —
dms. l.c.l. works lb. .17½- —

Sodium alginate, NF, white powd., dom. 300 lbs or more lb 1.02 —

Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted lb. 1.90 —

Sodium antimoniate bgs. c.l. dlvd. E lb. .27½ —
bgs. l.c.l. dlvd E lb. .29 —

Sodium arsenate 60% arsenic pentoxide, 200 lb. dm less than ton lots, t.o.b. works lb. .24 —
ton lots or more same basis, lb. .23½- —

Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb .20 - —

Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 6.80 - —
less than 100-kilos kilo 7.05 - —

Sodium benzoate tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms. l.c.l. same basis lb .39 - —
USP dms. c.l. t.l. frt alld lb. .38 - —
dms. ton lots, same basis lb. .43 - —
dms. 1,000-lb lots same basis, lb 45 —

Sodium bicarbonate USP, gran. bgs., c.l. works 100 lbs 2.95 - —
bgs. l.c.l. works 100 lbs 3.85 - —
USP powd. bgs c.l., works, 100 lbs 2.55 —
bgs. l.c.l. works 100 lbs 3.45 —

Sodium bichromate gran. bgs., c.l., t.l., works lb. .13 —
bgs. l.c.l. works lb. .13½ .14¼
Sodium bichromate in dms ¼c per lb higher

Sodium bifluoride, fib, dms., c.l., works, frt. equald lb. .19½- —
fib, dms., l.c.l., same basis lb. .2025- —

Sodium bisulfate bulk c.l. works, 100 lbs 2.00 —
dms c.l., frt equald 100 lbs 3.00 3.60
dms. l.c.l. frt equald 100 lbs 3.50 4.10

Sodium bisulfite anhyd., bgs. c.l. works 100 lbs 5.00 —
bgs. l.c.l. works 100 lbs 5.45 - —
Soln. 35° bbls. c.l., works 100 lbs 1.70 - —
bbls l.c.l works 100 lbs 2.20 - —

Sodium borate (see Borax)

Sodium borohydride powd., dms., c.l., works lb. 19.90 —
dms. l.c.l. works lb 33.00 40.00

Sodium borohydride stabilized water soln 12% NaBH 100% basis dms works lb 15.00 —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.

Sodium bromide USP gran dms., works lb. 40 - —

Sodium carbonate cryst. monohydrated (see Soda sal)

Sodium carbonate, monohydrated, bgs., c.l. works 100 lbs 3.10 - —
bgs. l.c.l. works 100 lbs 3.50 - —

Sodium carboxymethyl cellulose (see CMC).

Sodium chlorate cryst., 350-lb dms., c.l. works lb .09 —
dms. l.c.l. works lb .09½- .10½
Sodium chlorate in 100-lb dms. only, ¼c per lb higher

Sodium chloride, tech (see Salt)

Sodium chloride, USP gran. bgs. lb. .05 - —

Sodium chlorite tech. dms., c.l., works lb. .58 - —
dms. 20-dm lots or more works lb. .66 - —
dms., smaller lots, works lb .70 .73

Sodium chloroacetate, tech. dms., c.l., works lb. .27 —
dms. l.c.l. works lb. .28 —

Sodium chromate, anhyd. fib dms., c.l., t.l., works lb. .14¾ —
fib dms l.c.l. works lb. .15¼- .16½

Sodium chromate tetrahydrate, bgs. c.l. t.l. works lb. .1015- —
bgs. l.c.l lb. .1065- .1190

Sodium citrate anhyd. 200-lb dm., f.o.b works E lb. .62 - —
NF VIII gran bgs., c.l., same basis lb. .26 - —
USP XIV gran. bgs., c.l., same basis lb .29 —
Sodium citrate, USP powd prices ½c higher.

Sodium cyanate dms. 1,000-lb lots, works lb. .85 —
dms. smaller lots, works lb. .90 1.10

Sodium cyanide, briquettes or gran., 97 percent min., dms., works 20,000-lb lots lb. .176 - —
dms., same basis, 5,000 to 19,999-lb lots lb. .188 - —
dms. same basis, 1,000 to 4,900-lb lots lb. .198 - —

Sodium cyclamate, 100-lb dm. f.o.b. works lb 1.95 - —

Sodium diacetate, anhyd. 39-41% acetic acid, dms., c.l., works lb. .18 —
250-lb dms. c.l., works lb. 18¾- —
Tech 33-35% acetic acid, dms., l.c.l., works lb. .15 —
250-lb dms. l.c.l. works lb. .15¾- —

Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l. frt alld., 100% basis lb .42 —
dms., l.c.l. t.l., same basis lb. .47 .52
tanks, same basis lb .38 —

Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots lb. .14¼ —

Sodium fluoride white, 97%, fib. dms. c.l., works, frt. equald lb. .1390- —
fib dms., l.c.l., works, frt. equald lb. .1465- —

Sodium formate, bgs. c.l. works 100 lbs. 7.05 - —
bgs. l.c.l. ex whse 100 lbs 8.65 —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —

Sodium gluconate, refd., 250-lb. dm., f.o.b works E lb. .34 - —
Tech. bgs., c.l. t.l., same basis lb. .34 - —

Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 2.90
25% soln. in oil, dms., 50 lbs. or less, f.o.b shipping point, lb. 2.20 - —
dms., 50-99 lbs. same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb 1.20 —
dms. 1,000 lbs or more, same basis lb 93 —

Sodium hydrosulfide (see Sodium sulfhydrate).

Sodium hydrosulfite dms c.l., frt. alld lb. 23½ —
dms. l.c.l. frt alld. lb. 25½- —

Sodium hydroxide, NF, pellets, 100-lb dms. 1 to 100-dm lots, lb .23½- .25

Sodium hydroxide, tech (see Soda, caustic).

Sodium hypophosphite NF dms. 1,000-lb. lots lb. .99 - —

Sodium hyposulfite (see Sodium thiosulfate).

Sodium iodide, USP, 300-lb dms. f.o.b. works lb. 2.13 - —

Sodium taurylsulfate, dms., c.l., dlvd lb. .20½- —
dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd lb .19½- —

Sodium lignin sulfonate, bgs., c.l., works 100 lbs 4.25 6.50
l.c.l., bgs. works 100 lbs 4.40 7.00

Sodium metabisulfite (see Sodium bisulfite).

Sodium metaborate octahydrate gran bgs. c.l. works ton 210.00 —
bgs., ton lots, ex whse 100 lbs. 8.30 - —
bgs. smaller lots ex whse 100 lbs. 9.61 -11.61
Tetrahydrate bgs. c.l. works ton 210.00 —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs. smaller lots, ex whse 100 lbs. 16.08 -18.08

Sodium metallic, bricks, c.l., works, lb. .21 - —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —

Sodium metaliinate, bbls., frt. alld. lb. .62 - —

Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —

Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works, 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —

Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 —
bgs., l.c.l., works 100 lbs. 4.80 6.75
dms., l.c.l., works 100 lbs. 4.95 —
dms., l.c.l., works 100 lbs. 5.30 7.25

Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 .99
Cryst., dms. works frt. alld lb .74 .76

Sodium monoglutamate (see Monosodium glutamate)

Sodium monohydrate (see Sodium carbonate monohydrated)

Sodium naphthionate, bbls. lb. .72 - —

Sodium nitrate, dom., crude, bgs., c.l. works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —

Sodium nitrite, USP bbls., c.l., works, frt equald 100 lbs 9.00 —
bbls., l.c.l., same basis 100 lbs 11.00 —

Sodium orthosilicate conc. dms., c.l. works 100 lbs 6.70 —
dms., l.c.l., works 100 lbs 7.05 7.65

Hydrated, flake, bbls., c.l., works 100 lbs 5.65 —
bbls., l.c.l. works 100 lbs 7.60 7.90

Sodium oxalate, 98% bgs. works 100 lbs 12.35 —
99% bgs. works 100 lbs 15.40 —

Sodium para-aminobenzoate (see Sodium p-aminobenzoate)

Sodium para aminosalicylate (see Sodium p-aminosalicylate)

Sodium pentachlorophenate, briquets, dms., c.l., works, frt equald lb .26 —
dms., l.c.l., same basis lb .27½ .34
Pellets, dms., c.l., same basis lb .26 —
dms. c.l. same basis lb .27½ .34
Powd., dms., c.l., same basis lb. .25 —
dms. l.c.l., same basis lb. .26½ .33

Sodium pentabarbital USP, dms., 100 lbs. or more lb. 6.00 —

Sodium perborate NF, tech., bgs., c.l., works lb. .18½- —
bgs. l.c.l. works lb. .19 .21

Sodium peroxide, dms., c.l., t.l., dlvd E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 .22½

Sodium phenobarbital USP, 100-lb. dms lb. 3.75 —

Sodium phenosulfonate, USP, IX, gran., dms lb. .52 .58
NF, powd., dms lb. .55 .58

Chemucopia!

That's Latin slang for "plenty of chemicals." The source of this hydrocarbon luxury is Delhi's diversified petroleum streams and selected feed stocks. Now producing a wide range of aromatic and aliphatic hydrocarbons, Delhi-Taylor can move quickly into production on a number of new petrochemicals.

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With plants on the Inland and Coastal Waterways, Delhi can offer low cost, fast deliveries. Strategically located petrochemical terminals add to our delivery advantages.

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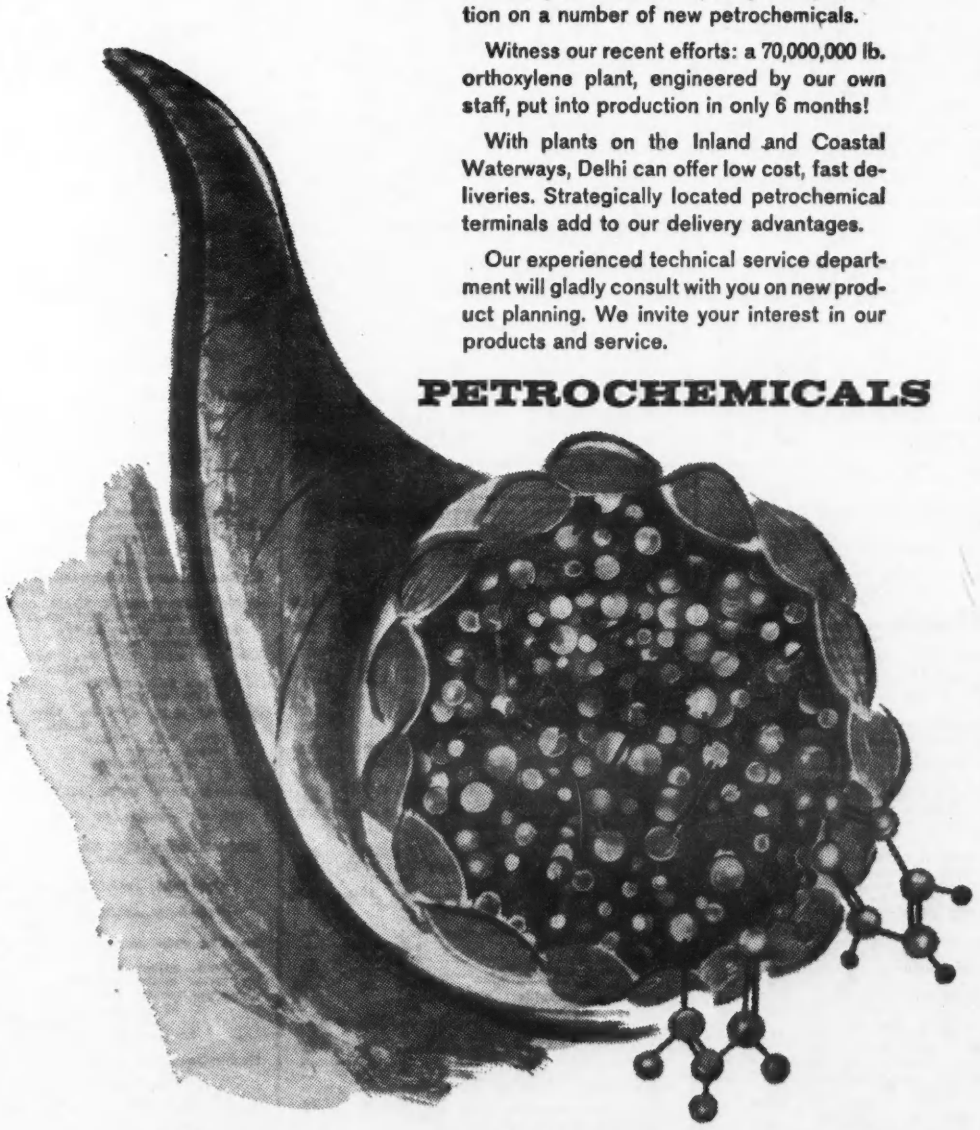

CHEMICAL DIVISION
DELHI-TAYLOR OIL CORPORATION
FIDELITY UNION TOWER, DALLAS 1, TEXAS • 415 MADISON AVE., NEW YORK 17, N. Y.
CORPUS CHRISTI • CHICAGO • CHARLESTON, S. C. • BATON ROUGE • HOUSTON

Sodium phosphate, dibasic, anhyd., bgs. c.l. frt equald 100 lbs. 8.10 - —
bgs., l.c.l., same basis 100 lbs. 8.50 - 9.55
Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt equald 100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs. 5.15 - 5.90
Dibasic duohydrate, bgs. c.l. frt equald 100 lbs. 7.75 - —
bgs., l.c.l., same basis 100 lbs. 8.25 - —
Monobasic anhyd. bgs. c.l. frt equald 100 lbs. 9.15 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - 10.15
Tribasic anhyd. bgs. c.l. frt equald 100 lbs. 9.15 - —
bgs., t.c.l. frt. equald 100 lbs. 9.60 - 10.20
Sodium phosphate in dms. 60c to 80c. higher than bgs
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 .20½
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms. dlvd E of Rockies. lb. .37 - —
Prices W of Rockies 3c per lb more.
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l., works, frt equald 100 lbs. 11.25 - —
bgs., l.c.l., same basis 100 lbs. 12.00 - 12.50
Sodium pyrophosphate, terric, dms., c.l., t.l., works lb. .36 - —
dms. t.c.l. works lb. .37 .39
Tetrabasic, anhyd., bgs., c.l. works, frt equald 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP dms., 1,000-lbs or more lb. 78½- —
dms. less than 1,000 lbs. dms lb. 81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 —
Sodium sesquicarbonate bgs., l.c.l., dlvd. zone 1 100 lbs 4.10 4.35
dlvd zone 2 100 lbs 4.35 4.60
dlvd zone 3 100 lbs 4.75 4.90
dlvd zone 4 100 lbs 5.35 5.60
Sales zones are (1) All states E. of Miss., R and N of south bound of Ky and Va., Ala., La and Miss. south of 31°; Tex. E. of 100°; S of 31° Fla.; also Me., N H and Vt in which there are special county zones; Davenport Ia., and St Louis; (2) Ark E. of 98° Ga.; to va (except Davenport) Minn., Mo. (except St Louis) Neb E. of 98° N C., S C., Tenn and Tex N of 31° and E. of 100° (except Wichita Falls); also Ala., La and Miss. No of 31°; (3) Ark W of 96° Kan., Neb W. of 98° N D., Okla., S. D., Tex., W of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso, Tex
Sodium sesquisilicate, anhyd., bgs., c.l. t.l. works 100 lbs 5.70 - —
dms. c.l. t.l., works 100 lbs 6.20 - —
Sodium sesquisilicate hydrated, bgs. c.l. works 100 lbs 5.00 - —
bgs. 6,000-19,900 lb tots, works 100 lbs 5.35 - —
dms. c.l., works 100 lbs 5.50 - —
dms. 6,000-19,900 lb tots works. 100 lbs 5.85 - —
Sodium silicate, liq., 40° Be 1:3.2, turbid dms. c.l. works 100 lbs 1.65 —
dms. t.c.l. works 100 lbs 1.90 2.40
tanks works 100 lbs 1.20 —
47° Be 1:2.9 turbid, dms., c.l., works 100 lbs 2.25 —
dms., t.c.l., works 100 lbs 2.60 3.45
tanks works 100 lbs 1.90 —
52° Be 1:2.4 turbid, dms., c.l., works 100 lbs 2.65 —
dms., t.c.l., works 100 lbs 3.00 3.50
tanks works 100 lbs 2.30 —
Solid 1:3.2 bgs. works ton 67.50 —
Sodium silicofluoride, bgs., c.l., works lb .065 —
bgs. t.c.l. works lb 725- —
Sodium silicofluoride in dms. 0.4c per lb. higher
Sodium stannate dms. works frt. alld, E lb. .648 - .707
Sodium sulfa drugs (see Sulfa name)
Sodium sulfanilate bbls. works lb. .22 —
Sodium sulfate NF VII, dried, powd., dms lb .22½- —
Tech., anhyd. bgs c.l. dlvd E ton 56.00 - —
Sodium sulfate, tech., detergent, rayon grade, bgs., c.l., works ton 38.00 - —
bulk, c.l., works ton 34.00 - —
USP cryst. fib dms lb 17½- .18
Sodium sulfhydrate, flake 70-72%, dms. c.l. works, frt. equald lb. 07¼- —
dms., t.c.l. same basis lb 08¼- —
Liq. 40-44% tanks works, 100% basis ton 130.00 —
Sodium sulfide flake, dms., c.l., works E, frt equald lb .06 - —
dms. t.c.l., same basis lb .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. 05½ —
bbls. t.c.l., same basis lb 06½- —
Sodium sulfite anhyd., powd., bgs., c.l., works 100 lbs 7.55 - —
bgs t.c.l. same basis 100 lbs 7.95 - —
Sodium sulfide, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs. t.l. same basis 100 lbs 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works frt equald lb .04½- —
dms., t.c.l. same basis lb .05½- —
Sodium thiocyanate, purified, cryst., 250-lb. dms lb. .90 - —
Tech. anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate NF cryst. bbls. lb. .13½- —
Tech. anhyd. 100-lb bgs. c.l., t.l., frt. equald 100 lbs 7.75 - —
100-lb bgs t.c.l., t.l., frt. equald 100 lbs 8.15 - —
Sodium thiosulfate tech., anhyd., photo grade, 64-lb bgs., c.l. t.l. frt. equald lb. .0775- —
64-lb bgs. t.c.l. t.l. frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate tech., pentahydrate, photo grade, 100-lb. bgs., t.c.l., t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns. 5-ton lots, works lb. .14¼- —
ctns., 1-ton lots or less, works lb .14¾- —

Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l., frt. alld E lb. .42 —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., l.c.l., same basis 100 lbs. 8.65 - —
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs 8.95 —
bgs., t.c.l., works 100 lbs 9.70 -13.13
dms., c.l., works 100 lbs 9.45 —
dms., t.c.l., works 100 lbs. 10.20 -10.60
Sodium tungstate, tech., kgs. dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., dlvd lb. .22½- —
dms., l.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F b.r., 14° 16°C. m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°-265°F b.r., 31°C. m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C m.a.p., tankcars, New Jersey and New York gal. .275 - —
Solvent naphtha, 319°-380°F b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322°-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate, fib dms., 20,000-lb. lots, works lb. .33½- —
fib dms., 10,000 to 20,000-lb lots, works lb. .35½ —
fib dms., smaller lots, works lb. .38½ .40½
Sorbitan tristearate, fib dms. 20,000-lb. lots, works lb. .34 —
fib dms., 10,000 to 20,000-lb lots, works lb. .36 —
fib dms., smaller lots, works lb. .39 .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., t.c.l. works lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 —
dms. 1 to 5-ton lots, works. lb .25 .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb .40½ —
Sorbitol, soln., comyl., aqueous, dms., c.l. works lb. .26 - —
dms., t.c.l., works lb. .27 - —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 —
bgs., t.c.l., works lb. .23¼ .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., t.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton. 63.00 - —
Soybean oil, crude, tanks, Decatur, lb. .12⅞- —
Foots, soapstock acid 95% tanks, New York lb. .06 - —
Refd., salad, dms. lb. .17¼- .17½
tanks lb. .15¼- —
Clarified, dms. lb. .16½- .16¾
tanks lb. .14½- —
Refd., salad, dms. lb. .17⅛- .17⅜
tanks lb. .15⅛- .15¼
Soybean oil acids, dbl. dist., dms., lb. .16¾- .19¼
tanks lb. .14¼- —
S. D., dms lb. .15½- .18
tanks lb. .13 - —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls lb .75 - —
Spearmint oil, NF, dms lb. 6.50 - —
Sperm oil, bleached winter, 45°, dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs lb. .32 .33
Cakes, cs. lb. .33 .34
Spruce oil, cns., dms. lb 2.10 3.35
Squill, white, bls. lb. .16 .18
Powd., bbls., bxs lb. .17 .20
St. John's bread, edible, bls lb. .17 —
Stannic chloride, anhyd dms., works lb. .817 - .839
Stannic oxide, dms., dlvd. lb. 1.10 - 1.11
Stannous chloride, anhyd dms. works lb. 1.268 - —
Hyd., dms., works lb. .87 - .88
Stannous sulfate, dms., works lb. 1.062 - 1.102
Star root (see Helonias root)
Stargrass root (see Aletris root.)
Stavesacre seed, bgs lb. .60 .61
Stearic acid, dbl., pressed, bgs lb. .16½- .19
Single-pressed, bgs. lb. .16 - .18½
Triple-pressed, bgs. lb. .18¼- .20¾
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .16½- .18
Streptomycin sulfate, bulk gram .03 .032
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure dms. 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate fib dms., dlvd, lb. .48 - —
Strontium iodide, jars, 25-lb lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works 100 lbs. 11.00 - —
bgs., t.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton. 56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. oz. 25.00 -35.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 2.50 - 3.00
Styrax gum, USP cs. lb 4.50 5.50

Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., same basis lb. .19 - —
tanks, frt. equald. lb. .13 - —
Styrene monomer, tech., 99.2%, dms., c.l., dlvd. lb. .15 - —
dms., t.c.l., same basis lb. .17 - —
tanks, frt. equald. lb. .11 - —
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.
Styrolyl acetate, bots lb. 1.03 1.10
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 —
dms., l.t.l., same basis lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., t.c.l., same basis lb. .52 - —
Sucrose, refd. white, bgs. refy E. lb. .0955- —
Sucrose acetate, isobutyrate, 90%, dms. t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 —
tanks, same basis lb. .31 —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs. l.c.l., works lb. 1.00 —
Sugar (see Sucrose)
Sugar cane wax dom., refd. slabs, 80-lb ctns., works lb. .60 .65
80-lb ctns. spot lb. .65 .75
Sulfabenzamide, dms kilo 8.80 9.90
Sulfabenzamide-sodium, dms kilo 9.00 -10.10
Sulfacetamide, USP, fib dms kilo 6.61 6.83
Sulfacetamide-sodium USP, fib. dms kilo 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo 23.35 -24.45
USP, powd., dms. kilo 22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo 24.80 -25.90
Sulfaguanidine NF X, dms kilo 5.50 6.60
Sulfamerazine-sodium, USP, powd., dms kilo 24.80 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo 19.65 -20.75
USP XV powd., dms kilo 18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs 16.00 —
dms., t.c.l., t.l., works 100 lbs 17.50 18.50
Gran., dms., c.l., t.l., works 100 lbs 14.75 —
dms., t.c.l., t.l., works 100 lbs 16.25 -17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald lb 1.50 - —
NF fib dm. frt equald lb 1.55 - —
Sulfanilamide quinoxaline, veterinary dms kilo 16.28 - —
Sulfanilic acid, tech. dms. c.l., frt. alld lb. .21 - —
dms., t.c.l., frt alld lb. .23 - —
Sulfapyridine, USP XV, powd., bots., tins kilo 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo 6.25 6.90
NF X, powd. dms. kilo 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 —
Sulfur, comi. flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines 100 lbs 3.30 - —
lump, bgs., mines 100 lbs 2.25 - —
rolls, bgs., mines 100 lbs. 5.50 - —
bbls., mines 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs 4.70 - —
Sulfur, rubbermakers, comi., reg., bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs 3.70 - —
98-100%, passing through 325 mesh, bgs., mines 100 lbs. 2.55 - —
bbls. mines 100 lbs 3.80 - —
Sulfur, rubbermakers, refd., bgs., mines 100 lbs. 4.90 - —
bbls., mines 100 lbs 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs 4.00 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05¼- —
ret. dms., t.c.l., same basis lb. .06¼- —
tanks, same basis lb. .04½- —
Sulfur dioxide, liq., comi., cyls., works, frt. equald lb. .10 .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .33 —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05¼- —
dms., t.c.l., same basis lb. .06¼- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., t.c.l., works 100 lbs. 2.30 - —
tanks, works ton. 18.60 - —
Sulfuric acid, 66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., t.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton. 22.35 - —
98% tanks, works ton. 23.50 - —
99% tanks, works ton. 23.70 - —
Sulfuric acid 100%, tanks, works ton. 23.95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, CP, NF, consumers', cbys., t.c.l., same basis, lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots., extra, cs., t.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20% tanks, works ton. 25.00 - —
40%, tanks, works ton. 29.00 - —
65%, tanks works ton. 39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 .93
bulk, c.l., Carteret, N. J. unit-ton. .90 .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk c.l., East Tampa, Fla., unit-ton. 1.00 - —
bulk f.o.b vessel at Fla unit-ton. 1.05 - —
Sweet birch oil, USP, northern cns lb. 4.00 9.50
USP, southern, cns lb. 2.00 3.05

T

2,4,5-T, dms., c.l., works, frt. equald, lb. 1.18 - —
dms., t.c.l., same basis lb 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., t.c.l., works lb. 1.29 - —

Talc, dom., fibrous, grd., bgs., c.l., works, New York ton. 28.00 - —
bgs., l.c.l., works ton. 31.00 -36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton. 31.00 - —
bgs., l.c.l., works ton. 34.00 - —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l. works ton. 38.00 - —
625 mesh, micronized, bgs., c.l., works ton. 80.00 - —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton. 34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton. 19.40 - —
bgs., l.c.l., works ton. 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton. 20.00 -35.00
tanks, works lb. .02⅞- .03⅛
Tall oil, crude, tanks, works lb. .03 - .03⅛
Dist., depending on grade, dms., c.l., works lb. .07 - .09⅛
tanks, works lb. .05¼- .08
Tall oil, refd., depending upon grade, dms., c.l., works lb. .07¾- .08⅛
tanks, works lb. .06½- .07⅛
Tall oil acids, dms., c.l., works lb. .07 - .10
dms., l.c.l., works lb. .07½- .10⅛
tanks, works lb. .05 - .07½
Tallow, edible, tanks, dlvd. lb. .11⅜- .11½
Inedible, fancy, bleachable, tanks. lb. .07⅛- .07⅜
fancy, guaranteed, bulk, f.o.b. steamer lb. .07⅛- —
dms., f.a.s. lb. .08⅛- —
tanks, dlvd. lb. .07½- —
No. 1, dlvd. lb. .06⅝- —
Prime, tanks, dlvd. lb. .06⅜- .06⅝
Special tanks, dlvd. lb. .06⅝- .06¾
Sulfonated, 25%, bbls., l.c.l. lb. .08½- .08¾
50%, bbls., l.c.l. lb. .10½- .11
Tallow acids, dist., dms lb. .13 - .15½
tanks lb. .10½- —
Hydrogenated, dms. lb. .15¼- .17¾
Tallow oil, acidless, dms., c.l. lb. .12½- —
dms., l.c.l. lb. .14½- —
tanks lb. .11 - —
Tangerine oil, Florida, dms lb. 4.75 - —
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 4.75 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb lots lb. 2.05 —
bbls., smaller lots lb. 2.06 2.07
NF, powd., bbls., 1,000-lb. lots lb. 1.95 —
bbls., smaller lots lb. 1.96 1.99
Tech., dms lb. 1.05 —
Tansy oil, dms lb. 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., dms., t.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
Tar acid oil, 25-28%, dms., c.l., same frt equald gal. .53½- —
basis gal. .60 - —
dms., t.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms. c.l., same basis gal. .75 - —
dms., t.c.l., same basis gal. .77 - —
tanks same basis gal. .65 - —
Tar coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb bgs., c.l., frt equald lb. .41 - —
bgs., 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb fib dms lb. .70 —
Terpineol, extra, dms lb. .50 .60
Prime, dms lb. .40 .50
Terpinyl acetate, extra cns., dms. lb. .64 .75
Prime, dms lb. .53 .56
Terpinyl propionate, dms lb. 1.65 1.70
Testosterone, USP bots gram No prices.
Testosterone propionate, USP bots. gram No prices.
Tetrachloroethane, dms. works lb. 14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene)
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms. t.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., dlvd E lb. .60 - —
dms. t.c.l. dlvd E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms. frt equald lb. .75 —
Tetraethylenepentamine, dms., c.l., dlvd E lb. .53½- —
dms., t.c.l., dlvd. E lb. .55 - —
tanks, dlvd E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt alld lb. 1.04 —
Tetrahydrofuran, dms. c.l., t.l., works lb. .36½- —
dms., t.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., t.c.l., Memphis, Tenn lb. .32½- —
dms., c.l., t.l., Newark, N.J. lb. .33½- —
Tetrahydrofurfuryl alcohol, dms., t.c.l., Newark, N. J. lb. .34½- —
tanks, dlvd E of Denver lb. .31 —
tanks, dlvd W of Denver lb. .32 —
Tetrahydrophthalic anhydride dms., c.l., t.l., frt alld E lb. .39 - —
t.c.l., t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal, dlvd lb. 7.50 -10.00
Thallium sulfate, 99% bots. dlvd. lb 5.00 -10.00
Theobromine, NF fib dms. 100-lbs., f.o.b., works lb. 4.10 - 4.15
Theobromine and sodium acetate, USP, fib dms. 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, fib dms., 500-lbs., works. lb. 3.80 - —
Theophyline, USP, anhyd. 100-lb dms., frt alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt alld kilo. 36.00 - —
USP, ampule grade, fib., dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib dms frt alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. 74 - —
dms., less ton lots lb. 76 - —
Thiodiphenylamine (see Phenothiazine)
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 - —
Tungstated, PTMA, kgs works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80% dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech, bgs. t.l. frt alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb 3.50 - —
dl-Threonine, dms., 100 kilos, works kilo. 121.00 —
Thyme leaves, French, triple sifted extra, bgs lb. .27 - —
Spanish, extra, bgs lb. .12 - —
triple sifted, bgs lb. .25 - —
Spanish, bgs. lb. .09 - —
Thyme oil, NF, red, cns., dms. lb. 2.00 - —
NF, white, cns lb. 2.20 - —
Tech., white, cns. lb. .40 1.85

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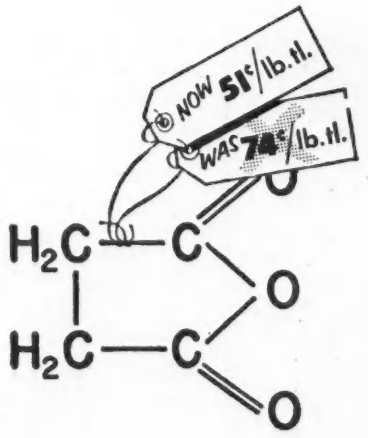

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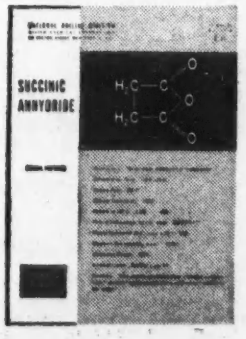

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Thymol, fib. dms., 25-lbs., f.o.b. works lb. 2.45 • —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works lb. 7.30 • —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.03 • —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd. (see Stannic chloride anhyd.)
Titanium dioxide anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd. lb. .26½- —
reg., bgs., c.l., dlvd. lb. .25½- —
bgs. l.c.l. dlvd. lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla ton.180.00 - —
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y. ton.205.00 - —
bgs. ton lots, same basis ton.215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd. E lb. .27½- —
bgs. l.c.l., dlvd E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09⅜- —
bgs., l.c.l., works lb. .09½- —
80% Ti O_2, high-tinting, dms., c.l., lb. .14⅜- —
dms. l.c.l. lb. .14⅞- —

Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 • —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 • —
Tobias acid, dms., c.l., t.l. lb. .81 • —
dms., l.c.l. lb. .84 • —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo.67.00 • —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 • —
d-a-Tocopheryl acid succinate, cryst., bots kilo.109.00 • —
dl-a-Tocopherol, bots. kilo.99.00 • —
dl-a-Tocopheryl acetate, bots kilo.90.00 —
25% dry, powd., bots kilo.22.50 -24.00
33⅓% dry, powd., bots. kilo.30.00 -31.50
o-Tolidine base dry, kgs., 100% basis lb 1.55 —
Paste, kgs., 100% basis lb 1.50 —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

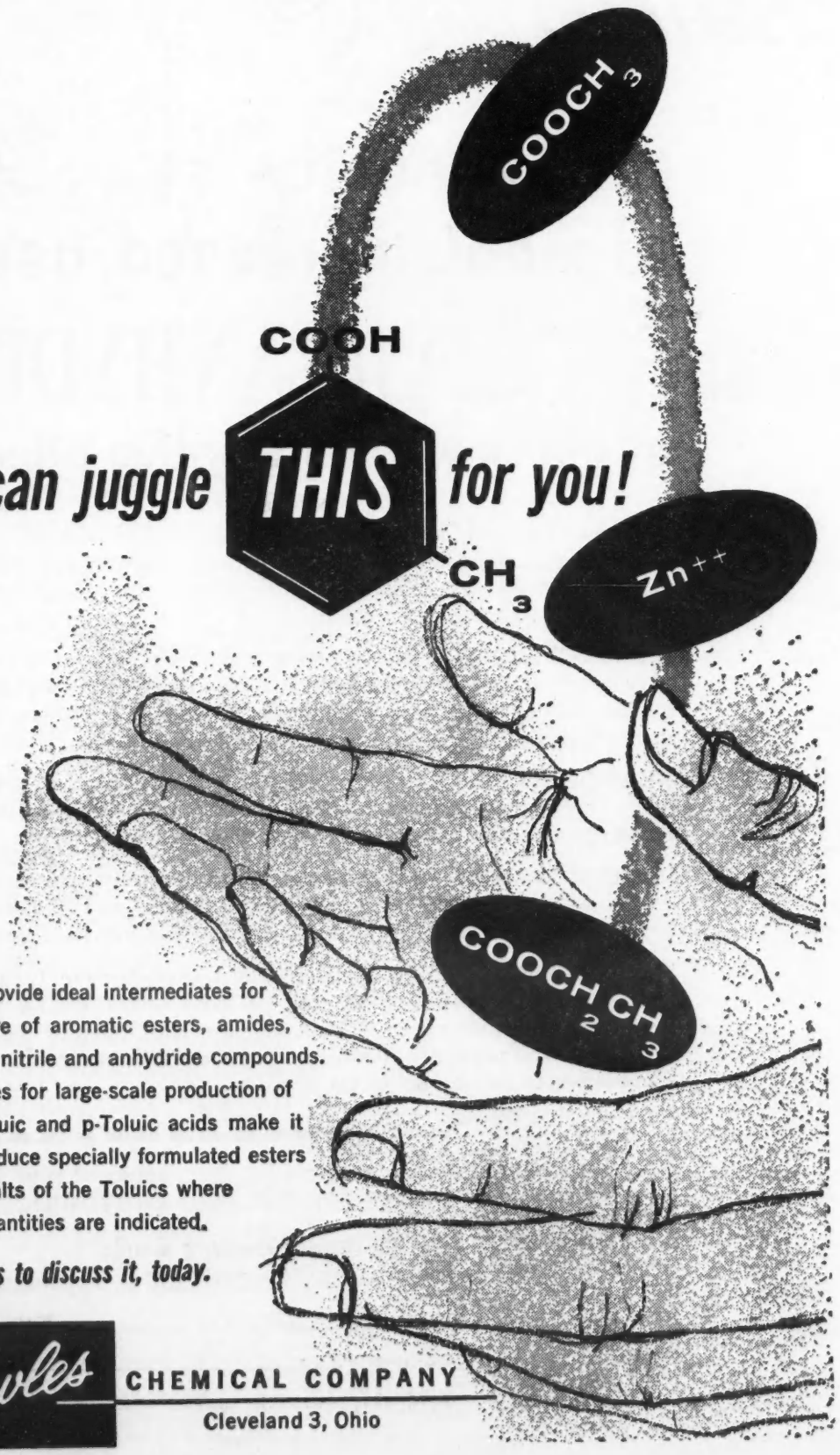
o-Tolidine hydrochloride paste, kgs., 100% basis lb. 1.50 • —
Tolu balsam, cns. lb. 4.00 • —
Toluene, coaltar, industr., or nitration, tanks, dlvd. E. of Rockies gal. .25½- —
Toluene, petroleum industr., tanks, f.o.b., frt. equald gal. .25 • —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 • —
dms., l.t.l., same basis lb. .63 • —

Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .16 • —
1,000-lb. or more, same basis lb. .18 • —
less than 1,000-lb., same basis lb. .23 • —
tanks, same basis lb. .14 • —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.
p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l. lb. .90 • —
dms., 125 lbs. to t.l. lb. 1.00 • —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 • —
dms., l.c.l., same basis lb. .84 • —
tanks, same basis lb. .82 • —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 • —
dms., l.c.l., same basis lb .31 • —
tanks, same basis lb. .28 • —
p-Toluidine, tech. flake, dms., frt. alld lb. .50 • —
Cast, dms., frt. alld. lb. .45 • —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 • —
Light shades, kgs, works lb. 1.70 • —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt alld lb. 1.10 • —
Tonka beans, Angostura, cks. lb. 1.50 • —
Brazilian, Surinam cs. lb. 1.30 • —
Totaquine, 100-oz tots, cns. oz. .42 • —
Toxaphene, dms., c.l., t.l., works. lb. .22 • —
dms., l.c.l., t.l., works lb. .28 • —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 - 4.20
No. 2, cs. lb. 3.75 - 3.80
No. 3, cs. lb. 3.40 - 3.65
USP, powd., bbls. lb. 1.05 - 1.15
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 • —
dms., l.c.l., same basis lb. .40 • —
tanks, same basis lb. .37 • —

Triallylamine, dms., c.l., dlvd. lb. .965 • —
dms., l.c.l., dlvd. lb. .995 • —
tanks, dlvd. lb. .96 • —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver. lb. .42¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver lb. .40 • —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms, l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 • —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 • —
tanks, same basis lb. .65 • —
Tributyrin dms. l.c.l. dlvd. lb. .69 • —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b. works lb. .52 • —
USP, 100-lb. dms., frt. equald lb. 1.25 • —
Trichlorobenzene dms. c.l., frt. alld. E. lb. .15 — —
dms., l.c.l. frt. alld. E. lb. .16 — —
tanks, frt. alld. E. lb 13¼ — —
Trichlorobenzene prices in the West 1¾c. higher
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼ — —
dms., l.c.l., dlvd lb. .16 — —
tanks, dlvd lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene dms. c.l., or t.l., dlvd lb. .12½- —
dms., l.c.l., dlvd. lb. .14 - .14½
tanks, dlvd. lb. .11¼- —
Trichloroisocyanuric acid dms., c.l., t.l., frt equald lb. .65 • —
dms. l.c.l. same basis lb .75 • —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys. works, frt adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 — —
dms., l.c.l., dlvd. lb. .36 — —
tanks, dlvd lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd lb. .35 • —
dms., l.c.l., dlvd. lb. .36 • —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms. c.l., dlvd. E lb. .26½- —
dms., l.c.l., dlvd. E. lb. .28 — —
tanks, dlvd E lb. .24 — —
Triethanolamine dms. c.l., dlvd E. lb. .24½- —
dms., l.c.l., same basis lb. .26 — —
tanks, same basis lb. .22 — —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l. frt alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine dms. c.l., dlvd E. lb. .50 — —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .47¼- —
tanks, frt alld E of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .42 — —
tanks, dlvd lb. .38 — —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 — —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms. l.c.l., dlvd E lb. .53 • —
tanks, dlvd E lb. .49 • —
Triisobutylene, tanks, dlvd. lb. .08 — —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¾- —
dms., l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 .305
tanks frt equald 100% basis, lb. .26 • —
25-40% soln. dms., c.l., frt. equald, 100% basis lb. .35 • —
dms., l.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt equald lb. .26 • —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .30½- —
dms., l.c.l., t.t.l., same basis lb. .31½- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 — —
dms. l.c.l., works lb. .51½- —
Tripentaerythritol bgs., c.l., t.l., dlvd. E lb. .34 • —
bgs., l.c.l., t.t.l., dlvd. E lb. .35 • —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls. l.c.l. frt equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 • —
Tripropylene dms., c.l., dlvd. E gal. .44 • —
dms., l.c.l., same basis gal. .54 • —
tanks, same basis gal. .28 • —
Tripropylene glycol, dms., c.l., t.l., frt alld E lb. .20½- —
dms., l.c.l. t.t.l. frt. alld. E lb. .22 — —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals min. frt. alld. E lb. .19 — —
Tripropylene glycol prices 1c per lb higher in west.
Trisodium phosphate (see Sodium phosphate tribasic)
di-Tryptophane, dms., 1 kilo, works. kilo.154.00 • —
Tung oil, dms., New York lb. .30 • .30⅛
tanks, imported lb. .28½- —
tanks, domestic, mills lb. .28½- —
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 • —
Tungstic acid tech., dms., 1,000-lb. lots, works lb. 2.25 • —
dms., smaller lots, works lb. 2.45 • —
Turkey red, bbls., works lb 6¢ —
Turpentine, gum (see Protective Coatings market, Naval Stores)
Turpentine oil, NF, cns., dms lb. .28 .50
Tuscan red, bbls., frt. equald lb. .26 .32
Tyrothricin, USP, 1 to 5 kilos gram. .50 • —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .30½- .35
Jobbing types, dry, bbls., same basis lb. .16 • .22½
Regular types, dry bbls., same basis lb. .16 • .37½
Ultramarine blue prices 1c higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs. l.c.l., works lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y lb. .08¼- —
Raw, American, bgs., works lb. .07¼- .08¼
Turkey-type, bgs., works lb 08¼- .08¾
Undecylenic acid 55-gal. dms., f.o.b. works lb. 1.28 • —
Unicorn root, false (see Helonias root)
Unicorn root, true (see Aletris root)
Urea 46% N, indust. bgs., c.l. t.l., f.o.b. plant ton.100.00 • —
Feed grade, c.l., t.l., f.o.b. plant. ton.95.00 • —
45% N, agricultural, b. plant. ton.92.50 • —
Bulk, c.l., t.l., same basis ton.86.50 • —



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dms., l.t.l., same basis lb .70 • —
Uva-ursi leaves, bls lb .12 • —

V

Valerian root, Belgian bgs. lb .32 • —
Indian, bgs lb .25 • —
dl-Valine, dms., 1 kilo, works kilo 37.00 • —
Vanadium pentoxide, tech, dms., works lb 1.38 • —
Vandyke brown, bbls, works lb .09½ • .12
Vanilla beans, Bourbon, tins lb 6.85 • 7.10
Mexican cuts, tins lb 7.25 • 7.50
whole, tins lb 7.65 • 8.50
Vanillin ex lignin, 100-lb fib dms., 2,000-lb lots or more lb 3.00 • —
less than 2,000 lbs lb 3.20 • 3.30
Venetian red, jobbing, bgs, works, lb .0475 • —
Venetian red, 20%, bgs., works lb .0525 • —
25%, bgs., works lb .0575 • —
30%, bgs., works lb .06 • —
35%, bgs., works lb .0625 • —
40%, bgs., works lb .0675 • —
Vetiver oil, Bourbon, cns lb 17.00 • -17.25
Haitian, cns. lb 12.00 • -14.00
Victoria blue toner, molyhdated, PMA 250-lb bbls., dlvd, E of Rockies lb 4.50 • 4.95
Tungstated, PTMA, 250-lb bbls., dlvd E of Rockies lb 5.55 • —
Victoria blue toner, bbls, prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb .1810 • —
55-gal dms, l.c.l., dlvd lb .1960 • —
tanks, dlvd. lb .1560 • —
tanktrucks less than 4,000 gal., dlvd lb .1610 • —
Vinyl n-butyl ether, tech dms., l.c.l. works lb .50 • —
Vinyl chloride monomer, tanks, works, min. frt. equald E. lb .0891 • —
Vinyl ether, USP, anethesia, bots., 50cc., hospitals bot 1.12 • —
bots 75cc, hospitals bot 1.56 • —
Vinyl ethyl ether tech., dms., c.l., works lb .30¼ • —
dms., l.c.l., works lb .31 • —
tanks, works lb .28¼ • —
Vinyl propionate monomer, dms., c.l. dlvd lb .49 • —
dms, l.c.l. same basis lb .50 • —
tanks, same basis lb .47 • —
Vinyl trichloride (see Trichloroethane)
2-Vinylpyridine, 10 dms to tanks, works lb 1.20 • —
1 to 9 dms., works lb 1.35 • —
tanks, works lb 1.15 • —
Vinyltoluene, dms., c.l., f.o.b., works, lb .16½ • —
dms., l.c.l., same basis lb .18½ • —
tanks, f.o.b dest, frt prepaid lb .14 • —
Viosterol in nat vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units .02½ • —
Virginia type red, bbls, works lb 1.40 • —
Vitiamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼ • —
Vitamin A acetate dry, 500,000 units per gram, kilo lots kilo 65.00 • —
325,000 units per gram, same basis kilo 43.88 • —
250,000 units per gram, same basis kilo 33.75 • —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units .09½ • —
Vitamin A palmitate, liq, 1,000,000-1,800,000 A units per gram 1,000,000 units .09½ • —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, fine gram 45.00 • —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram .57 • —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram .57 • —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B^{12} activity gram 52.00 • —
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo 52.00 • —
0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm 52.00 • —
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram 52.00 • —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin 500-gram bots, 1-5 kilo dms., frt. alld. gram .57 • —
0.1% cobalamin concentrate in gelatin 1-10 kilo dms., frt. alld. gram .57 • —
Vitamin C (see Ascorbic acid).
Vitamin D_3 (see Codliver and Fishliver oils, Calciferol and Viosterol)
Vitamin D dry, 850,000 units per gram, kilo lots kilo 42.50 • —
850,000 units per gram less than kilo lots kilo 45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots gram 4.50 • —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls lb 2.00 • 2.25
Warfarin, 0.5% dms., 50-lb. lots, dlvd lb 1.95 • —
dms., 25-49-lb. lots, New York or Chicago lb 2.05 • —
dms., 5-24-lb lots, New York or Chicago lb 2.15 • —
Watchung-type reds, bbls lb 1.95 • —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms. gal 12.25 —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls lb .21 • .23
White precipitate, USP, powd., dms., 100 lbs. f.o.b works lb 5.50 • —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb .30 • —
Wintergreen oil, USP nat northern, cns lb 6.35 -17.50
USP nat southern, cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb .30 • .35
Witch hazel leaves, bls lb .75 • .80
Wollastonite, fine paint grade, bgs., c.l., works ton 41.00 • —
bgs., l.c.l., ex whse ton 51.00 • —
Wollastonite, medium paint grade, bgs., c.l., works ton 29.00 • —
bgs., l.c.l., ex whse ton 39.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs lb 2.50 • —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb 4.75 • —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal .29 • —
Birmingham dist. gal .29 • —
Chicago dist. gal .28½ • —
Cleveland dist. gal .29 • —
Geneva, Utah gal .29 • —
Johnstown, Pa. gal .29 • —
Lackawanna, N.Y. gal .29½ • —
Lone Star, Tex gal .27 • —
Lorain, Ohio gal .29 • —
Middletown, Ohio gal .30 • —
Minnequa, Col gal .29 • —
Philadelphia dist. gal .29 • —
Pittsburgh dist. gal .29 • —
Sparrows Point, Md. gal .29 • —
Terre Haute, Ind. gal .29 • —
Youngstown, Ohio gal .29 • —
Xylene, petroleum, indust., tanks f.o.b works:
Bayonne, N.J. gal .29 • —
Baytown, Tex. gal .27 • —
Charleston, S.C. gal .29 • —
Chicago, Ill gal .28½ • —
Detroit, Mich., dlvd gal .27½ • .29
Houston, Tex. gal .27 • —
Philadelphia, Pa. gal .29 • —
Providence, R.I. gal .30 • —
Sewell's Point, Va. gal .28 • —
Wood River, Ill. gal .28½ • —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb .21 • —
dms., l.c.l., f.o.b., Richmond, Calif lb .22 • —
tanks, frt. alld. lb .19 • —
o-Xylene, dms., c.l., works lb .08 • —
dms., l.c.l., works lb .09 • —
tanks, works lb .06 • .06½
p-Xylene, dms., c.l., works lb .20 • —
dms., l.c.l., works lb .21 • —
tanks, frt. alld. lb .1645 • —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb .23 • —
56°-58°C., m.p. dms., l.c.l., works, frt. equald lb .33 • —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis, lb .40 • —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal 1.25 • —
dms., l.c.l., same basis gal 1.30 • —
tanks, same basis gal 1.05 • —
b.r. 7°-9° C., dry at or below 227° C., dms. c.l., same basis, gal 1.35 • —
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis gal 1.40 • —
2,4-Xylidine, tech., dms., frt. alld. lb 1.15 • —
2,5-Xylidine, tech., dms., frt. alld. lb 1.20 • —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb .39 • —
dms., l.c.l., same basis lb .40 • —
tanks, same basis lb .38 • —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene

Y

Yara yara oil, cns. lb 2.15 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, dlvd lb .27 —
Yeast, brewers, primary, USP XV, 150 mcg. B_1 per gram, 100-lb dms lb .47 —
USP XV, 270 mcg. B_1 per gram, 100-lb dms lb .52 —
Yeast, brewers, primary, USP, XV, 300 mcg., B_1 per gram, 100-lb dms lb .56 —
USP XV, 900 mcg. B_1 per gram 100-lb dms lb .60 —
Torula, USP dlvd lb .18 —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls. lb .40 45
Ylang-ylang oil, Bourbon, bots lb 7.00 22.00

—Continued on page 72

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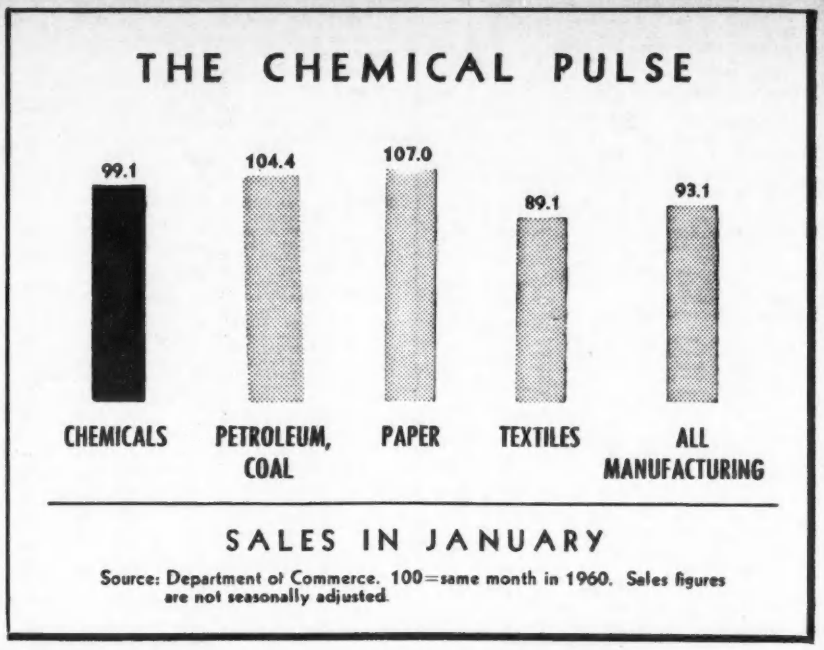

Source: Department of Commerce. 100=same month in 1960. Sales figures are not seasonally adjusted.

Help for the Needy World

In further recognition that the United States has—or at least must assume—a major—yes, a solitary—obligation in the service of humanity throughout the world, President Kennedy announced March 1 the establishment of a volunteer non-political foreign service agency designed to provide opportunities for qualified young men and women to "share in the common task of bringing progress to under-developed countries."

The new project has had a most enthusiastic reception on the part of those who are eager to do such sharing. There is some reason to wonder whether that enthusiasm will stand up under the test of the regulation that those in the service will not be paid any salary and will be required to live at the same level as the peoples of the country or community to which they are sent, to do the same work, eat the same food and speak the same language.

In whatever line they must work, their primary occupation will be the teaching of its better doing, and it will comprise numerous areas of technical and professional skill, ranging from agriculture to health services.

For some reason not obvious to many of those who have a practical, or even an academic, interest in the assisting of the peoples of under-developed countries to improve their standard of living, the new agency is called a peace corps.

The puzzled folks wonder why it has not been given a designation more broadly in keeping with its objectives in the expansive field of friendly international services. They admit that peace is a most desirable and essential factor in satisfactory living. But, they feel that it is not the only factor or even the most important—or pertinent—in terms of US world relations or purposes.

In that feeling, believing that the objective of the President's program comprises peace, progress, prosperity, friendship and freedom, they are inclined to feel that the name of the agency is far too narrow, and that, if a short name is desired, "friend" should be substituted for "peace."

The selection and training of those who are enlisted as members of the corps is going to be a big and hard job. It is most desirable and positively necessary that the members be normally American in basic characteristics and that they be qualified socially and culturally, as well as technically, for the service in which they will be engaged—and the contacts which that entails.

The directing staff has been chosen with due regard for its acquaintance with foreign relations from the US and all other points of view. The director is a businessman who has been publicly advocating something of the nature of the President's program for more than three years. Of the other fourteen members announced some ten days ago, one is a university athletic director; another is a career expert in foreign aid, and a third is a professor of physical medicine and rehabilitation. All of the others have had a goodly measure of training and experience in fields of human relations.

As a whole or in any of its parts, the directing staff can with confidence be expected to set up a series of programs that will do what is required of them, and to staff their application and operation with a full potential of success.

Business should do all that it can to advise and assist toward the successful operation of the peace corps. But, it is sincerely to be hoped and earnestly to be urged that, in their application and operation, its programs of international service be kept free from the commercialization that has put a damper on what US relations with Latin Americans should be.

Unbalanced Foreign Trade

The political noise about putting and keeping this country on the black-ink side of the record of trading with the rest of the world did a good job last year. Exports increased 20 percent in value; imports decreased 3 percent. In total value, exports exceeded imports by approximately 4.9 billion dollars—almost four times as much as they did in 1959.

That sure looks good—from a political point of view. But, what can truly be said about it commercially—even if money does talk? What is its significance in terms of the social and cultural factors of international trade relations? They may not talk; but they sure do count.

There is pertinence in that association in the disruptive statement, attributed to Latin Americans, that "the United States looks for business opportunities yielding the richest rewards"—a major factor in the disappointing condition that when other countries get some US money because they can supply this country with some necessary natural material, they spend it in some other country because it will get them more of what they want there.

This country, being the richest in the world, should buy more from the rest of the world than it sells to it. What it buys and where it buys it are matters for careful consideration and well-thought procedure. The patronage should most wisely and humanly be given to the under-developed countries. It is far better for them—and for us—that they be helped by way of the balanced methods of trade rather than through the one-sidedness of handouts.

It has very often been made quite obvious that politicians do not take that view of what should be the position of this country in world trade. The extent to which that reflects the views of their constituents is an unknown quantity.

So, it is not possible justly to lay the blame for the putting of all sorts of obstacles in the way of the progress of the treaty for the Organization for Economic Cooperation and Development before the senate foreign relations committee last week. The balance-of-payments gap has talk-making and action-blocking potentialities at least as powerful as those of the missile gap.

US business should study out its opportunities in world trade of a fairly balanced nature. It should also get fully acquainted with the attitudes and operations which will enable it to make the most and the best of those opportunities.

The lesson to be learned there will be found to have little, if any, relation to political economy—or what passes for such. Its basic theme is commercially economic. And every person properly acquainted with that economy knows that in practice it must be teamed up with social economy. It is people that count.

Washington Talks It Over

FTC's in a Crackdown Mood and Here's Why: Paint Being Sold on a Phoney 'Two-for-One' Basis And Toiletries That Appear to Have Been Made Abroad, But Weren't.

By Ralph L. Cherry
Washington Editor

Paint manufacturers, toilet goods producers and tire dealers, take heed!

Federal Trade Commission is in a crackdown mood over the misrepresentations that are being made to distribute the products of these industries, and someone is going to get hurt if conditions are not changed.

The commission doesn't like the so-called "two-for-one" sales that are being practiced in the paint industry—sales which aren't what they're supposed to be. And it doesn't think much of the way some people in the cosmetic and toilet preparations industry are trying to palm off their domestically-made products as being of foreign origin.

Tire dealers have the commission looking over their shoulders again because of confusing comparative retail price claims and how their guarantees are honored and pro-rated.

Within the past ten days, FTC has made moves against selling practices in all three of these industries, with promises of more to come if conditions don't improve.

What the commission wants is a voluntary clean-up—some greater effort at self-policing, but it is ready to bring down the weight of the law if this is necessary.

After a study of many complaints that have come to its attention, the commission has issued notices of warning to some forty manufacturers in the toiletries and cosmetic preparations industry telling them to discontinue simultaneously any improper foreign origin representations for domestically-made products.

Trade practice rules for this industry permit use of foreign words implying foreign origin if imported ingredients are used, but they must be qualified if the finished product is one that was mixed or blended in this country. In such instances this must be disclosed clearly and conspicuously on the front of any package or bottle.

FTC has set up a time table for the industry to get in line. The commission wants to know by March 20 from the forty producers whether they intend to cooperate. They then have until April 20 to submit specimens of proposed revised package and bottle labeling, and the revised labeling is expected to be in use industry-wide no later than June 30.

OPD'S BOOKSHELF

Psychopharmacology

DRUGS AND BEHAVIOR* deals with one of the more promising areas of present-day drug research: the effects of psychoactive drugs such as tranquilizers, energizers and psychotomimetics on human behavior and experience. These drugs are important because of the social, ethical, medical and psychiatric problems involved, the publication's editors point out.

Subject matter of the book emphasizes objective behavioral studies involving human subjects as the means for drug evaluation. Contributions fall into two general groups: those discussing general theoretical and methodological issues involved in drug research, and those reporting on specific research activities carried on by the contributors.

The book reviews and summarizes important work already done in psychopharmacology. Some of the articles describe new methods and technics which promise to be of real value in future psychopharmacological research.

*DRUG AND BEHAVIOR. Edited by Leonard Uhr and James G. Miller. 678 pages. John Wiley & Sons, New York. $10.50.

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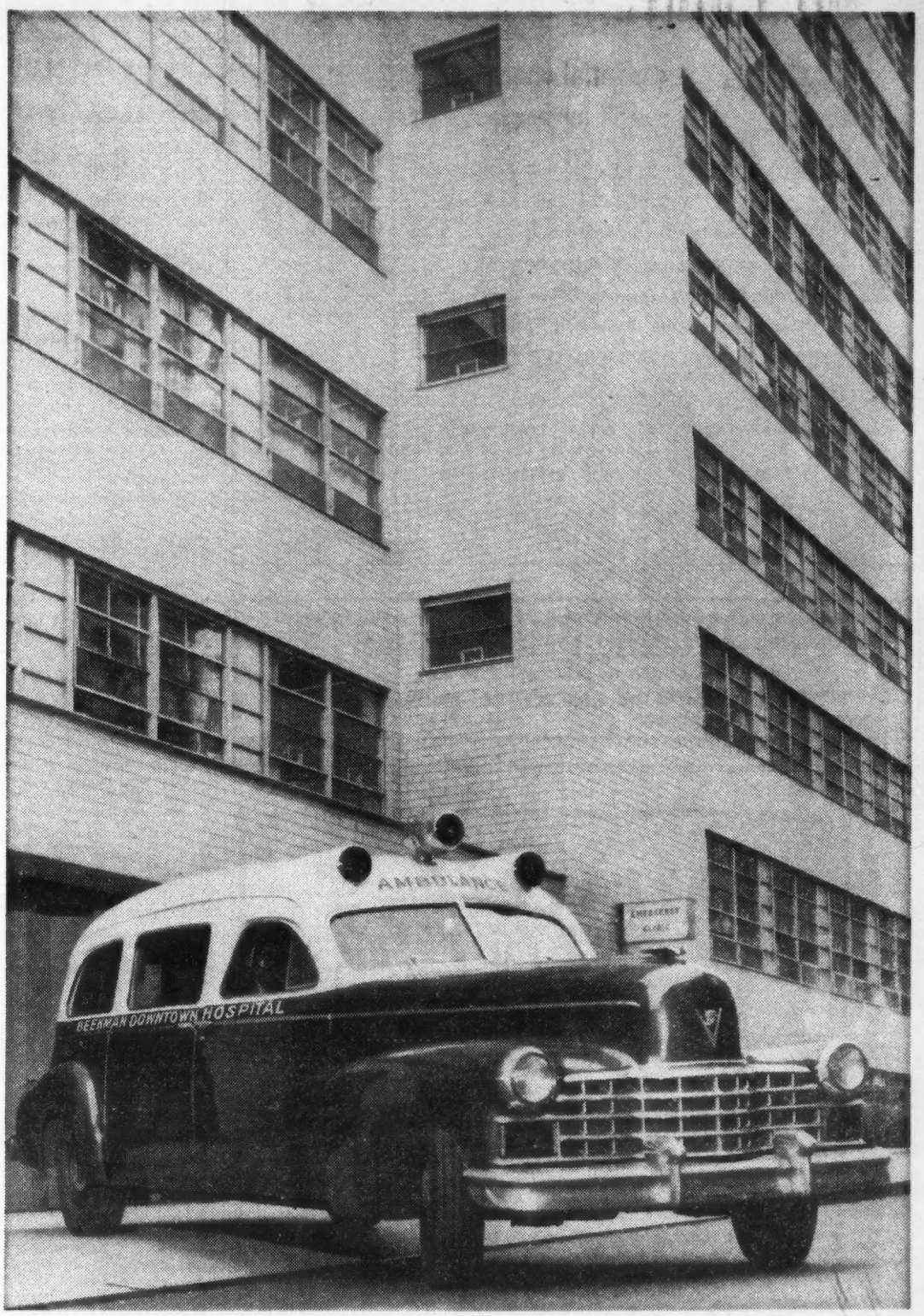

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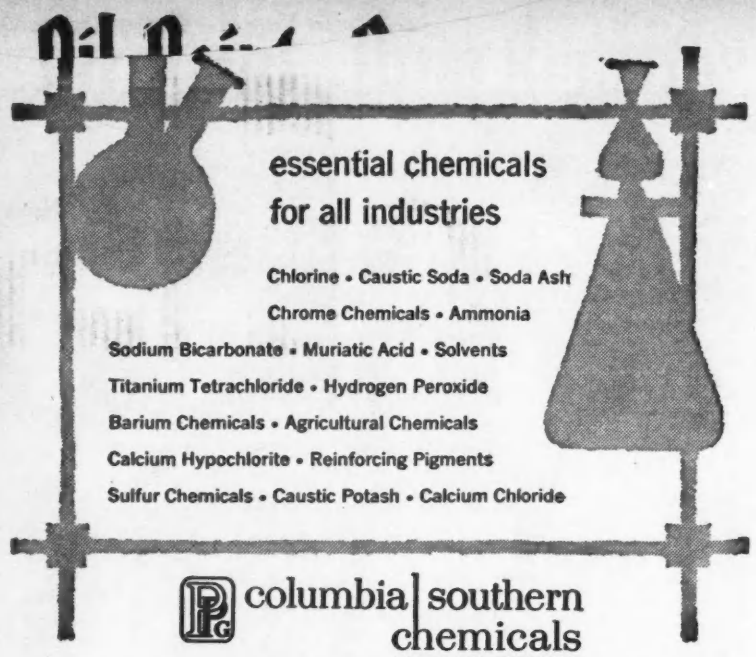
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Heavy Chemicals

Byproduct Sodium Sulfate Supplies Seen Adequate by Nearly All Makers

Rayon is moving at a good pace, despite a shuttered plant here and there, and this means adequate supplies of byproduct sodium sulfate for the soap season just getting under way. That's the consensus of trade views, but it's not a unanimous one. A tightening of supplies toward the summer months, when soapers are moving at full tilt, is seen by one producer which sells both byproduct and natural saltcake. But neither a price rise nor a resort to natural material (commanding a premium of as much as $8 a ton in the East) is anticipated. Another spokesman says his company will be able to meet its commitments out of rayon and chemical sources, but that there's a tight outlook for the market as a whole.

Detergent business, accounting for about 8 percent of sodium sulfate consumption, has become one of the most sensitive area of the market. When rayon falters, natural cake producers have an opportunity to make up the supply deficit, and one company is already doing a marginal amount of such business.

Natural Versus Byproduct Prices

Priced at $22.50 a ton at the California shipping point, natural detergent-grade cake becomes just about competitive, when freight is added, with the $34 byproduct material at Eastern areas close to the Mississippi. When moved all the way to the Eastern seaboard, however, the total tab is more like $42.

Soapers naturally prefer to shop the byproduct market before paying this $8 premium.

Though ready to supply what the market needs, natural cake producers have a vested interest in rayon itself, and therefore are not eager to cut the ground out from under the byproduct material. A fair tonnage of natural cake moves into the pulp that supplies the rayon mills.

This, observers say, is perhaps the reason there has been no move to equalize freight rates with the rayon byproduct.

Detergent consumption of saltcake, should hold its own this year. One source sees the long-range uptrend starting to flatten out because of the gains made by liquid detergents using polyphosphates. Another sees it as steadily upward.

The outcome—here in the East at least—may depend upon the trend of rayon and the availability of cheap byproduct sulfate.

Kraft paper, representing 70 percent of the market and one of the fastest growing segments, remains the favored preserve of natural producers.

Business in this line was off 4 to 5 percent during the first two months of the year, following the general trend of paper production, one producer reports.

But new orders on the books, he adds, indicate that the Kraft trade, having pared its excess inventory, is ready to move back to full production.

Price Trends

Advanced

Tin (Straits), metal, 1c. per lb.
Salts, ½c. to ⅝c. per lb.

Reduced

None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
130.46	130.46*	131.51	132.54

(* Revised.)

For Current Prices see Page 10

April 1 Price Advances

Ammonium bicarbonate, ½c. per lb.
Sodium nitrite, 40c. per 200-lbs.
Sulfur dichloride, dms., c.l., ¼c. per lb.
dms., l.c.l., ½c. per lb.
Sulfur dioxide, cylinders, small lots, 1c. per lb.
Sulfur monochloride, dms., c.l., ¼c. per lb.
dms., l.c.l., ½c. per lb.

Acids

Hydrochloric—Good demand in chlorinated solvent outlets helps to underpin a market that could otherwise be unnerved by the prolonged lassitude of steel. Also helping to keep its chin up are the active demands for food processing and oil well treating, sources in the trade report.

Hydrofluoric—Bulk shipments to the aluminum industry are reported active, reflecting the continued strength of that industry. But drum lots for smaller consumers have followed the general downtrend of business, running about 5 percent behind last year's pace, sources in the trade report.

Sulfuric — Business conditions and prices were unchanged from last week's report.

Steel production last week (ending March 4) totaled 1,580,000 net tons, a narrow decline from the previous week's 1,582,000 tons, American Iron & Steel Institute reports.

Paper Production Higher

The American Paper & Pulp Association reported paper production for the week ended March 4, at 91.5 percent of theoretical capacity, as compared with the revised figure of 87.8 percent for the previous week and 97.1 percent for the corresponding week of last year.

Bases and Salts

Aluminum Sulfate—Water sanitation needs, comprising roughly one-third of the alum market, have held up well, running at least even with last year's pace, owing to the stormy weather.

After starting the year briskly, paper and pulp production began to fall off in February and has since been running about 5 percent behind last year's level. Trade sources estimate that the decline in alum consumption has been roughly equivalent, although some observers hold that when production goes down, the paper industry becomes more "efficient" in its use of raw materials.

Ammonium Bicarbonate — Prices have been advanced ½ cent a pound across the board, effective immediately on spot. Contract prices will be similarly revised April 1. Under the revised schedule, truckloads are quoted at 7½ cents a pound, f.o.b. Philadelphia.

Calcium Hypochlorite — A revised schedule was posted effective March 13 incorporating changes in both directions depending on quantity, package and grade. The new schedule follows:

High-test granular, 100-pound drums, $39.50 per drum; 35-pound pails, $21; case of 9 5-pound cans, $27.50; one 5-pound can, $3.09.

High-test tablets, 100-pound drums, $39.50; 35-pound pails, $21; case of 12 4-pound containers, $29.75; and one 4-pound container, $3.10.

Caustic Soda—Business is rated fair to good, considering the general trend of business. Prices, long unchanged with a resulting narrow profit margin, are likely to remain so, with no action or hint of action reported for the second contract quarter.

Chlorine—Arrangements have been completed by a major producer to load customer's single unit chlorine tanktrucks. Price has been established at the same level as when seller supplies the car, with an allowance of $1 per ton. Freight will not be equalized, the company announces.

Sodium Nitrite—Prices will be advanced 40 cents a hundredweight on April 1. The advance was erroneously reported in this space as 15 cents. Under the new schedule, carloads and truckloads are priced at $9.15 a hundredweight for 100-pound bags, and $9.40 for 400-pound fiber drums, f.o.b. works, freight equalized. Less carload prices, f.o.b. works, will continue to carry a $2 premium.

Sulfur Chlorides—Spot prices on drum

Heavy Chemicals

shipments of sulfur mono- and dichloride were advanced ¼c. in carlots and ½c. in less than carlots on March 10. Contract prices will be similarly raised on April 1. The increase reflects higher packaging and handling costs.

Sulfur Dioxide—As previously reported, prices of liquid sulfur dioxide will be advanced on April 1 to 10c. a pound for truckloads, 11c. for six or more cylinders and 13c. for one to five cylinders. This is the first price increase in 150-pound cylinders since 1950. The new schedule also eliminates the metropolitan pricing heretofore prevailing.

Nonferrous Metals

Mercury—Prices were steady at $206 to $209 per flask, large lots, following their recent $2 decline.

Tin—Price closed at $1.03 a pound for straits metal, up 1c. from a week ago.

Heavy Chemical Briefs

BEER REGULATORS: Linde Company, a division of Union Carbide Corporation, has introduced two new carbon dioxide regulators for use in beer dispensing systems. They have been especially designed to provide precise control in either stationary or portable equipment, the company says.

BERYLLIUM SUPPLIES: Only 5 percent of US beryllium needs are mined in this country, but if necessary the nation could be self-sufficient in supplying its complete requirements. Such is the opinion of Dr. Norman Williams, a geologist and vice-president of Beryllium Resources, Inc., Beverly Hills, Calif. His company's flotation process, Dr. Williams says, could more than double production efficiency.

CYANAMID EXPLOSIVES: American Cyanamid Company will investigate, develop, synthesize and produce experimental quantities of high-energy explosives for the Bureau of Naval Weapons. A contract covering the work has been awarded to the New York company.

ELECTROLYTIC MANGANESE: Ohio Ferro-Alloys Corporation, Canton, Ohio, has been named by Foote Mineral Company, Philadelphia, as its US agent for sale of electrolytic manganese metal to the foundry trade and to secondary brass and aluminum smelters.

NICKEL FOR BEERS: Department of the Interior announces that its Office of Minerals exploration has approved an exploration assistance contract with Roland F. Beers, Inc., Troy, N. Y., to explore for nickel in Knox County, Me.

SMALL LOTS: Ruger Chemical Company, New York, has been appointed small quantity distributor by Kessler Chemical Company, Philadelphia. Ruger already serves Atlas Powder Company, E. F. Drew & Co., Chas. Pfizer & Co. and others.

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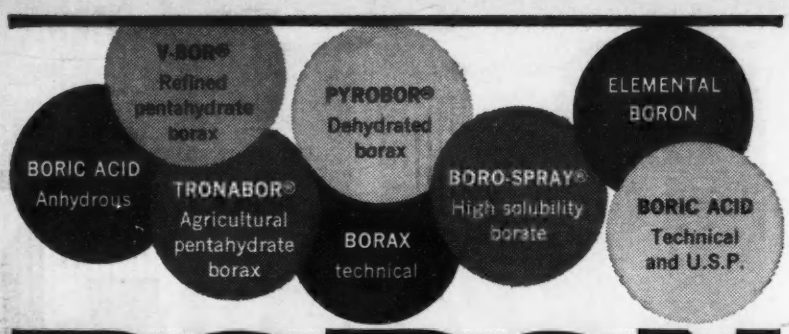

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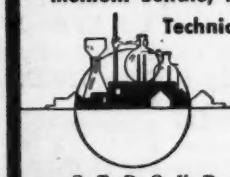

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Acetylene Plant Construction Started by Linde Company

A new acetylene plant to supply Colorado Fuel & Iron Corporation is now under construction at Pueblo, Colo., by Linde Company, a division of Union Carbide Corporation. The plant, Linde says, will meet requirements of a contract just signed with CF&I for the supply of acetylene for a five-year period.

The new facility, slated for completion near the end of April, will have a capacity of 1.5 million cubic feet per month of acetylene.

In other developments, a new liquid oxygen-nitrogen plant built by Linde is reported in production supplying rocket engine development facilities at Fort Crowder Reservation, Neosho, Mo. The new plant, with a capacity of 140 tons per day, will also supply the increased needs of other industrial gas consumers throughout the southwest by means of railroad tank cars and highway liquid transports, Linde reports.

Neosho is the fourth of five Linde plants designed primarily to meet the growing needs of the nation's aerospace program, the company points out. Two others producing liquid oxygen and nitrogen are in operation at Pittsburg, Calif. and at Huntsville, Ala. A third plant is currently producing 6.5 tons per day of liquid hydrogen rocket fuel at Torrance, Calif. and construction of a 26-tons-per-day liquid drogen rocket fuel at Torrance, Calif., and way at Fontana, Calif., this June, for completion in mid-'62.

Chemical Clearance Sale

—Continued from page 3

to something nearer half their present size.

Mr. Robertson made the announcement upon being elected chairman of the joint committee for the next two years, succeeding Rep. Paul Brown, of Georgia.

He said that materials now held in the stockpile were bought to help fight a conventional war that might last three to five years.

Much of this material, he added, might have no practical value for military purposes in the present missile age. He thought that half of the stockpiles could be sold off without endangering security.

The national stockpile of strategic and critical materials is made up of seventy-six items with a value in excess of $6 billion. None of these items, except those of a perishable nature, can be sold without express approval of congress. Of these seventy-six items, fifty-three materials—as of the last semi-annual report—had been acquired in such quantities as to equal or exceed the maximum objectives.

Included among materials whose objectives have been met are such chemically-important items as aluminum oxide, castor oil, chromite, cobalt, copper, fluorspar, graphite, hyoscine, iodine, lead, magnesium, mercury, nickel, opium, pyrethrum, quinidine, rare earth, shellac, talc, tin and vegetable tannin extract.

Grace Brings on Stream

—Continued from page 4

raw material for urea production and outside to customers who have increased their consumption of ammonia.

Until now, the urea production facility, which adjoins the ammonia plant, had to obtain a portion of its ammonia requirements from outside sources.

Urea capacity, originally 50,000 tons a year, was doubled in 1959, making the Memphis plant the third largest urea tonnage facility in the US.

The new plant employs the steam-methane process in which steam is reacted with natural gas, producing hydrogen.

Antitrust Complaint

—Continued from page 5

junction restraining the association and its members from conspiring to fix prices. The court has also been asked for an order to dissolve the association's committee on prescription pricing, wages and hours.

The second complaint asserts that purchasers of prescription drugs in Idaho have been charged arbitrary and noncompetitive prices since 1957 because of an alleged conspiracy. About 95 percent of all pharmacies in Idaho, licensed to sell prescription drugs, are members of the Idaho drug group, It is asserted.

Propylene Carbonate Correction

Propylene carbonate, recently introduced in commercial quantities by Dow Chemical Company, is priced at 35½ cents a pound for 55-gallon drums in carloads and truckloads. The price appearing in last week's issue of Oil, Paint & Drug Reporter had been erroneously reported by Dow at 33½ cents. Prices for other quantity brackets were correctly reported.

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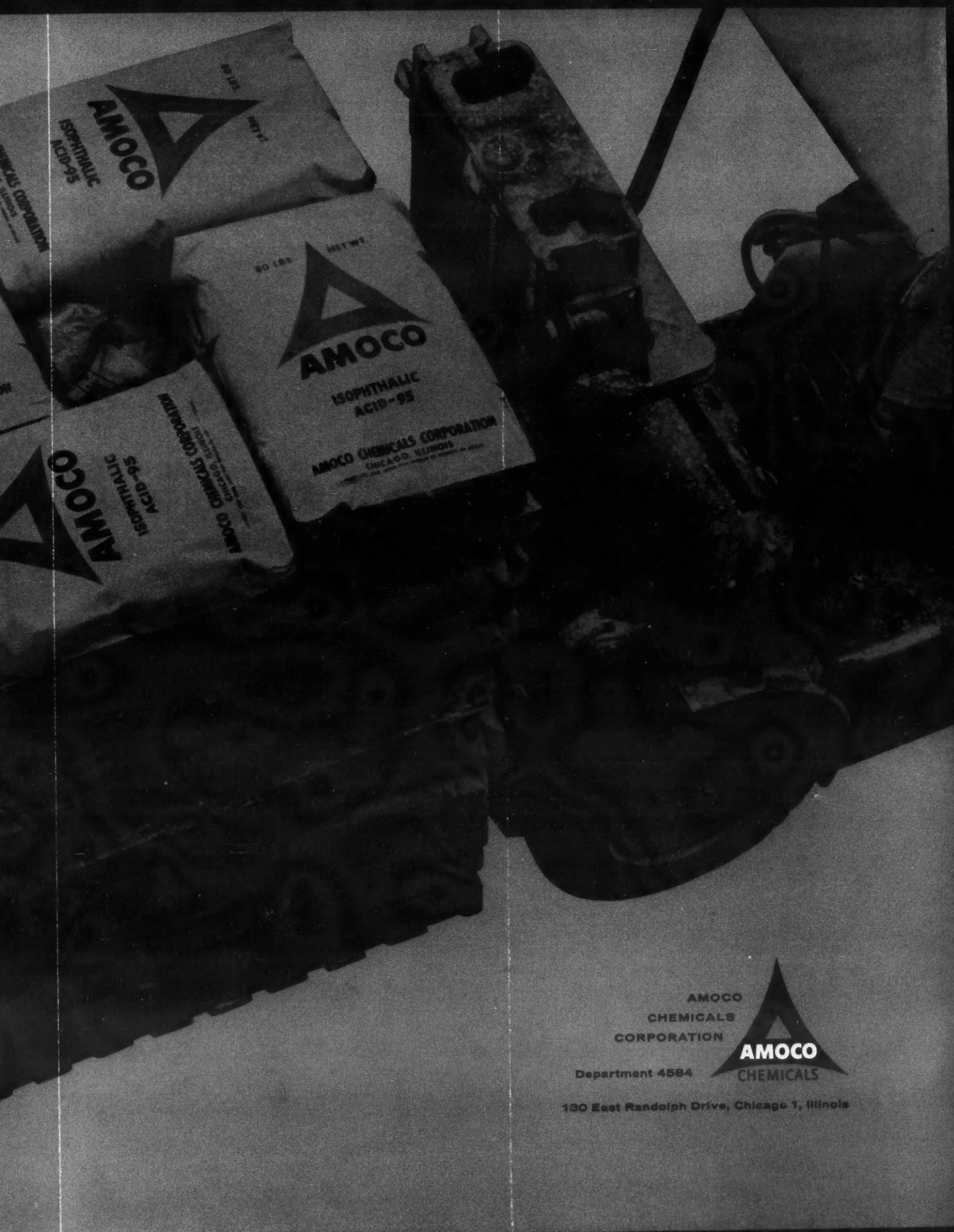

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Obituaries

Dr. Floyd E. Bartell, professor emeritus of chemistry at the University of Michigan, died March 5 in Ann Arbor, Mich. He was seventy-seven years old.

Dr. Johannes H. Bauer, internationally-known research physician who retired several years ago, died March 4 in Baltimore, Md. He was seventy-one years old. Dr. Bauer was one of the pioneers in developing a vaccine for yellow fever.

William H. Gesell, jr., president of R. Gesell, Inc., New York wholesale drug concern, died March 8 in Montclair, N. J. He was forty-six years old.

Arthur M. Hall, retired traffic manager for Spencer Kellogg & Sons, Buffalo, N. Y., died March 3. He had been associated with the company for thirty-five years.

Kuo-ching Li, president of the Wah Chang smelting and refining interests and a leading authority on tungsten, died March 7 in New York. He was sixty-eight years old.

Maurice Maubert, president and director general of P. Robertet et Cie., died March 6 in Grasse, France.

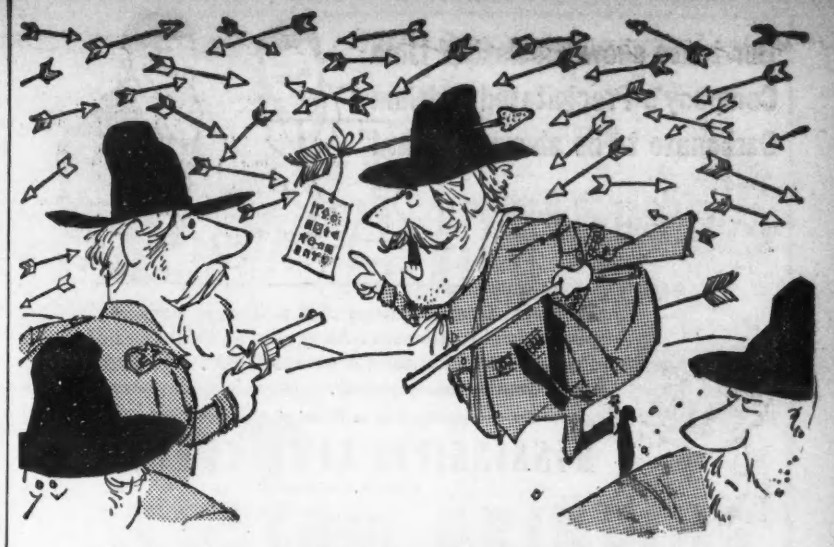
Benzene Installation

—Continued from page 5

May 1, getting its raw materials from internal sources as well as by outside purchase. The operation will involve cracking, re-cycling and fractionation, resulting, Dow says, in a high grade of benzene.

Dow last month announced plans for a benzene unit as its Bay City, Mich., petrochemicals plant. Slated for start-up in mid-1961, this plant will convert a benzene-toluene mixture supplied by Ohio Oil Company, OPD, 2/20/61).

As the world's largest styrene producer, Dow has been among the largest customers for benzene. Output from the Freeport plant will, of course, be used for processing into styrene.



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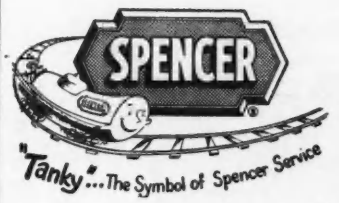

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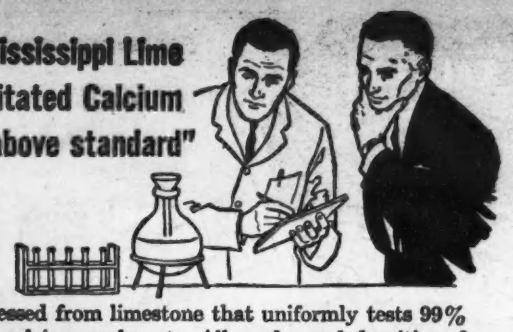

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Hercules Offers Resin Having Unique Solubility

Hercules Powder Company has introduced a new synthetic resin, "Pentalyn 255," which is said to be uniquely soluble in both alcohol and aqueous ammonia.

The resin, Hercules says, has been designed from a "broad property viewpoint" rather than from the angle of limited end-use application. It is said to be hard and friable at room temperatures and to exhibit a broad range of compatibilities as well as having a high softening point.

These characteristics suggest immediate applications in flexographic and glycol-soluble inks, overprint lacquers, polymer-type emulsions, and in a wide range of similar processes, Hercules says.

In polymer emulsions, particularly of the type suited for dry-bright polishes, "Pentalyn 255" is said to act as an economical leveling agent to produce films of excellent clarity, gloss and brilliance.

Western Market Men to Meet

Western Chemical Market Research Group will hold its 131st meeting Thursday (March 16) at the Marines' Memorial Club in San Francisco. Winton Pettibone, staff economist with Standard Oil Company of California, will give a talk on "Technics of Economic Forecasting, with Reference to the Western Economy."

Chemical Expansion Plans

—Continued from page 7

are not out of keeping with industry generally, nor with the manufacturing group as a whole.

The report said that businessmen plan to spend about $34.5 million on new plant and equipment in 1961, a decline of 3 percent from last year. The survey indicated that businessmen anticipate the decline in investment, which began in the third quarter of 1960, will continue through the second quarter of this year.

The last half of 1961, however, may be different, according to the two agencies. Present plans point to a mild increase in capital expenditures beginning in July, supported by predictions of better sales performances in 1961 than in 1960.

Manufacturers as a whole look for an increase of about 3 percent in sales, it was stated.

Manufacturing firms are planning outlays of about $14 billion in 1961, as compared with $14.5 billion in 1960, with the decline in investments attributable to the durable goods industries.

Iron and steel companies account for a large part of the anticipated decline in the durable category; outlays by this industry are expected to drop by one-fourth in 1961.

Stone, glass and clay, and fabricated metal products firms also are scheduling large relative decreases. The motor vehicle companies are planning to increase their outlays by about 15 percent to $1 billion in 1961, while machinery and nonferrous metals producers expect to maintain 1960 levels of investment.

Polybutadiene Plant

—Continued from page 7

many, who originated the fundamental discoveries leading to stereo specific catalysts, and from Goodrich-Gulf Chemicals, Inc., which applied these discoveries to the production of stereo specific rubbers.

The project is part of a Polymer Corporation expansion program which includes, in addition to the polybutadiene unit, facilities for butyl rubber, specialty rubbers, and black masterbatch.

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Agricultural Chemicals

A sizable fertilizer bid consisting of about 388,000 tons or urea, fused magnesium, double and triple superphosphate, and ammonium sulfate is reported to be up for grabs. The Indonesian government is reported seeking bids through its agency Mari Sari. But before anyone starts sharpening pencils, experienced trade sources have this word of caution: The Indonesians are perennially optimistic about actual requirements, often doubling them in an effort to get the best possible price.

There is some talk in the trade, too, that the Indonesians prefer to deal in sterling areas where the possibility of driving a harder bargain is much greater, but other sources close to the Indonesian market discounted this report.

On the basis of the last request by the Indonesians for fertilizers, US producers and traders did very poorly. This has lead to the observation in the trade that US producers have been priced out of the market. Freight costs, plus cost of material is enough to put American fertilizer material out of competition.

According to usually reliable sources, most of the Indonesian bid for 200.000 metric tons of fertilizer announced last November was filled in Europe and Asia, with the Indonesians still dickerng over some shipments of superphosphate in this country. Trade reports indicate that 10,000 tons of phosphate were purchased in Japan with some European producers reported as getting orders for over 100,000 tons of ammonium sulfate.

To those who would take the plunge the following details are offered; the invitation calls for 74,000 tons of urea; 60,000 tons of fused magnesium; 103,000 tons of superphosphate; 16,000 tons of double superphosphate; 10,000 tons of triple superphosphate; and 125,000 tons of ammonium sulfate. Specifications may be obtained from the Trade Development Division, Bureau of Foreign Commerce, Washington 25, DC.

No bid deadline has been set but quotations f.o.b. and c.&f. should be submitted as soon as possible to Nawir Harahap, Manager, Mira Sari, 22 Kali Besar Barat, Djakarta, Indonesia. Cable address: MIRASARI. According to the announcement offers should be made on the basis of the best possible prices for the specifications producers can supply.

While the details are lacking at this time, some confusion exists as to the actual extent of the bid. Last November, the Indonesian government requested bids on 200,000 tons of fertilizers. It is not known whether all or part of that bid request is included in the latest request.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
111.00	111.00	110.71	110.95

For Current Prices see page 10

and he questioned the sincerity of the bid on that basis. However, other sources report that several European producers have submitted bids that were lower than the American counterpart. Some traders feel that the logical source for the Indonesian requirements would be Japan. Despite the higher prices for ammonium sulfate there, the freight costs would be more than enough of a compensating factor.

Listings for ammonium sulfate are reported to be holding at the level established at the beginning of the fertilizer season despite the tight supply picture.

Animal Proteins — Commercial feedstuffs consumption totaled 5,965,800 tons during the October-December period this season, compared with 5,814,900 tons for the same months a year earlier. The five-year average for these months is reported at 5,217,700 tons, according to the US Department of Agriculture.

The number of grain-consuming animal units to be fed in the 1960-61 season is estimated at 166.2 million as against 165.8 million in the 1959-60 period and 163.3 million for a five-year average.

On the basis of this data, USDA reports that 71.8 lbs. of feed were fed per animal unit in the first quarter of the season compared to 70.1 lbs. in the same period last season and 63.9 for the five-year average.

Oilseed meal consumption of 3.4 million tons in October through December was reported to be 150,000 tons above the same months last season. Consumption of grain by-product feeds during the first quarter was reported to be about the same as a year earlier.

Production of meal meat and tankage totaled a record 424,000 tons the first three months of the season, slightly above last year. Disappearance of fishmeal totaled around 75,000 tons the first quarter, about the same as last year. Shipments of alfalfa meal were reported down slightly from the comparable months a year ago.

Urea—The urea market picture remains very competitive in many areas of the country. Listings are reported to be holding at their recently reduced levels with supplies at very ample levels in all market areas.

Imports of urea in December totaled 7,109 tons and was valued at $576,812 by Customs. Leading countries of origin were Canada, 2,765 tons ($219,401); Belgium, 1,051 tons ($80,000); United Kingdom, 822 tons ($72,284); Netherlands 708 tons ($52,120); West Germany, 292 tons ($26,966) with the remainder split up between Trinidad, Italy, Switzerland and Japan.

Animal and Plant Foods

Two leading American chemical producers, along with an Indian company, have received a license to build a $51 million fertilizer plant on India's east coast, it was announced last week. The plant will have a capacity of 350,000 tons of chemical fertilizer a year and will be located at Vishakhapatnam, near an oil refinery that will supply some of the raw materials needed in the plant's operation. The oil refinery is reported to be operated by an affiliate of one of the licensed companies.

In Italy, the state-owned petroleum group, ENI, is reported to have contracted to take 1.5 million tons of Egyptian crude in 1961-63 and in return supply Egypt with an unspecified amount of nitrogenous fertilizers, the Foreign Commerce Weekly reports. Total value of exchange in both directions is placed in the neighborhood of $24 million for the three year period.

The pesticide problem in the Soviet Union is discussed in a scientific publication and translated from the Russian and released through the Office of Technical Services, B&DSA, Department of Commerce. The reports are: Pests and Diseases of Vegetable Crops, and On the Mode of Action of Insecticides.

Ammonium Sulfate—While the Indonesians are seeking some 125,000 tons of ammonium sulfate in this country, trade sources report that supplies of ammonium sulfate in this country are very tight. Reduced steel output is the chief bottleneck in sulfate's supply problem.

In regard to the Indonesian bid, one trader reported that reasonable offers that he had submitted had been turned down

Pesticides

One of the major safety problems facing the air transportation industry today is the task of ridding airports of nesting bird populations. Ingestion of birds into the engines of high-speed aircraft has resulted in at least one air crash in Boston and is a constant threat to air safety. Pesticides are considered a valuable tool in this problem, so reports the US Fish and Wildlife Service.

While there is no habitat, either natural or man-made that will not attract certain species of birds at some season of the year, the airfield and its vicinity can be rendered less attractive to those species of birds that form the potential hazard.

The proper use of selective weed killers to remove weeds and brush around airports and on the airports plus the addition of insecticides to the grassy areas of runways to control grubs and other soil inhabiting insects would reduce the attraction of the areas as a food source to birds.

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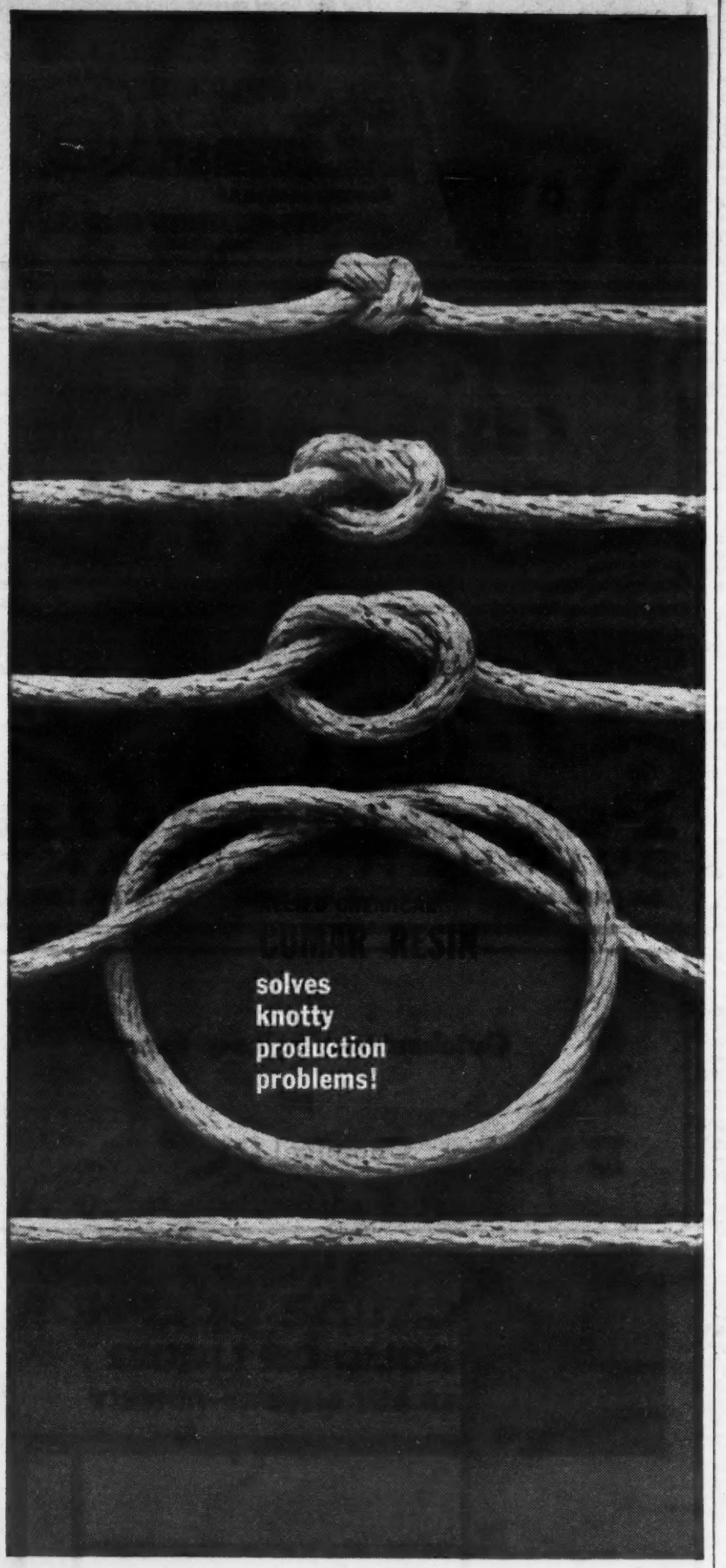

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Coal Chemicals

Cyclohexanol price will be increased 2 cents a pound across the board April 1. That's the word from a major producer who late last week announced a new schedule of 28 cents a pound in tankcars, 30½ cents for drums, carlots, and 31½ cents for drums, less carlots. Listings are freight allowed East of the Rockies. Thirteen dyestuff intermediates will also advance in price April 1. Increases range from 4½ cents to 25 cents a pound and will take effect on the following materials: 6-chloro-2-nitrotoluene; 2,6-dichlorobenzalchloride; F salt; Laurent's acid; 2,7-naphthalene disulfonic acid disodium salt; o-naphthionic acid; a-naphthylamine; Neville and Winther's acid; 5-nitro-2-aminotoluene; m-nitroaniline; picric acid (technical grade only); 2 R acid, and sodium naphthionate. Only seven of these are listed in OPD's price pages.

The increases were announced last week by a major chemical company and quickly confirmed by another thus making the advance substantially industry-wide.

Supply characteristics for all coal-derived chemicals are reported unchanged. Naphthalene, benzene, 2° pyridine and phthalic anhydride remain curtailed although the situation for benzene and naphthalene is expected to improve dramatically before the year is out.

April 1 Price Advances

6-Chloro-2-notrotoluene, 4½c. per lb.
Cyclohexanol, 2c. per lb.
F salt, 20c. per lb.
Laurent's acid, 17c. per lb.
a-Naphthylamine, 5c. per lb.
Neville and Winther's acid, 10c. per lb.
Picric acid, tech. grade, 6c. per lb.
Sodium naphthionate, 5c. per lb.

Added facilities will add supply and create a better balance—and possibly a loosely-supplied market for benzene—by Spring of 1962, trade observers opine.

Weathervane to watch for here is the stability of benzene export prices toward the end of the year. Any weakening in exports will undoubtedly presage domestic price decline.

First results of petroleum naphthalene quality are in and the product passes with flying colors. Trade observers report the world's first commercial plant is turning out an extremely high purity product, superior to coal-derived naphthalene.

Production of steel in the week ended March 4 was 1,580,000 net tons, down 0.1 percent from the preceding week.

Based on assumed 1961 steel capacity, rate of production for the week was 54.8 percent.

Basic Products

Benzene—Material is still reported in short supply.

Benzene is currently moving directly out of production to consumers, it is reported.

Producers did manage to build up stocks in January—nitration grade inventory at the end of the month was 2.8 million gallons, an increase of 9.1 percent—but this was due mainly to poor weather which restricted barge shipments and therefore curtailed deliveries.

Trade sources predict domestic price will remain firm through the balance of the year. If export prices weaken toward the end of the year, however, it is expected domestic price will follow, perhaps in the Spring of '62. Best opinions in the trade have it, however, that no change in either area will occur this year.

Cresylic Acid—Availability of European cresylic acid for export to the US is reported to be declining.

Even though continental steel producers operated at high rates of capacity last year through to the present, the amount of cokeoven raw material has dropped.

Reason for this is the replacement of coal by heavy oil which has been sold to German steel makers in particular in large-volume at low prices.

Natural gas has also made inroads in the production of manufactured gas which has also resulted in cutbacks in coal consumption.

Holland has uncovered great deposits of natural gas and is widening the use of the discovery to the detriment of manufactured gas to the point where that country's needs may in time be exclusively supplied by her own natural gas wells.

Germany, too, is cashing in on natural gas and along other lines is starting to move heavily in the direction of petrochemicals instead of continuing reliance on coal for production of needs.

Result of all these activities is a steady decline in the availability of material for export although the drop is not wide enough to have caused any upward movement in prices.

Naphthalene — Cokeoven supply of naphthalene remains restricted.

Some producers are continuing to spike their phthalic anhydride production lines with orthoxylene and mono-methylnaphthalenes in efforts to stretch naphthalene raw material. Purity has suffered as a consequence.

Steel rate continues to hover around fifty-five percent of capacity, up only slightly from late last year's levels, although some optimistic signs are being spotted that a more definitive recovery may be in the making which may add naphthalene supply to the market.

Petroleum naphthalene yields are reported to be of extremely high purity by the trade. World's first commercial plant is operating smoothly and supplying five contract customers at present. The question of how soon material will be available for the open market is still moot.

Volume of imported material has been increasing in past weeks.

Trade sources report that most of the added material arriving in US ports is of British origin.

Value of shipments indicate they are part of old contracts as price works out to be 5 to 5½c. a pound. Current import price is around 15c. a pound.

Phenol—USP phenol is moving well according to trade sources but natural grades are reported currently sluggish.

USP material has picked up in recent weeks after out-waiting the effects of pre-January 1 inventory building.

Natural hasn't responded as yet and is providing a puzzle for producers.

Intermediates

Cyclohexanol—A major producer last week announced a 2c. across the board increase to become effective April 1.

New listing will be:

Tankcars—28c. a pound, freight allowed

—Continued on page 55

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
117.51	117.52	117.46	118.40

For Current Prices see Page 10

Cokeoven Output: January

The following statistics indicate production of selected coal chemicals as reported to the Bureau of Mines by cokeoven plant operators. Benzene statistics do not include motor benzol. All figures are reported in gallons.

	January 1961	*December* 1960	*January* 1960
Benzene, nitration	5,936,741	6,533,498	11,515,450
Industrial pure	2,762,030	1,773,523	3,617,554
Industrial 90 and other	152,901	134,661	181,203
Coaltar, crude	43,507,532	43,359,553	74,500,940
Chemical oil, crude	2,124,076	1,468,980	3,304,892
Solvent naphtha, crude and refined	349,227	271,403	427,233
Toluene, nitration	1,562,033	1,771,659	2,456,769
Industrial pure	397,249	385,163	485,575
Xylene, all grades	539,254	529,319	738,462

Xylenes Capacity Set to Jump in 1961

OPD 'Depth' Report on Xylenes

—*Continued from page 9*

From that point onward, production trends were down almost without interruption until a low of 26.5 million pounds was reached in November.

During the next two years, some sources believe, PA output will rise over the 400-million-pound mark. But this is still far below available raw material capacity at the beginning of '62.

Industry observers believe that this situation bodes no good for either naphthalene or o-xylene producers, and that prices for either or both will be stretched to the breaking-point, perhaps by the end of this year.

*Ethylbenzene ex Xylenes**

	1/1/61	1/1/62
	(*Millions of Pounds*)	
Cosden	22	22
Monsanto	..	40
Sinclair	..	75
Suntide	..	30
Tennessee Oil	..	20
Total	22	187

* In addition, Oronite Chemical Company offers ethylbenzene for sale, and Amoco Chemicals Corporation can make benzoic acid from it at its Joliet, Ill., plant.

No less swift than the o-xylene expansion race has been that for p-xylene. Industry capacity at the beginning of this year was pegged at 205 million pounds annually. By January 1, 1962, potential should be 310 million pounds.

Here expansions are going in more cautiously, however, owing to the high cost of equipment for separating the meta-para fraction. Practically all p-xylene made goes into terephthalic acid for polyester fiber and film.

Producers Like Firm Contracts

Hence producers usually predicate their expansions on firm contracts with fiber and film producers such as E. I. duPont de Nemours & Co., Eastman Kodak Company and the new Beaunit Mills, Inc.-Goodyear Tire & Rubber Company, Celanese Corporation of America-Imperial Chemical Industries, Ltd., polyester fiber ventures.

There has been some stir caused on occasion by the fact that processes are available whereby terephthalic acid can be made from benzene or toluene, but so far, there's no indication of a switch from the currently popular p-xylene route.

Amoco Chemical makes terephthalic acid and dimethyl terephthalate at its Joliet, Ill., mixed isomers plant and recently expanded its DMT to an estimated 18 million pounds a year.

Amoco's plant, always a dark horse, may have the answer to economic production of terephthalic, since it obviates expensive refrigeration, centrifuging and other operations needed to separate p-xylene.

The most prevalent isomer in xylene, and the one used the least for chemicals, is the meta fraction. It can occur in quantities of more than 50 percent of the total mixture.

Right now, California Chemical makes isophthalic acid from it, reportedly having produced more than 30 million pounds in 1960. Oronite, California's selling agent, and Amoco are both quite bullish about isophthalic.

Here again, Amoco's plant doesn't have to bother to separate out the meta. It goes through as part of the mixed stream and comes out isophthalic acid with a purity of more than 95 percent.

Other isomer separators such as Sinclair Refining Company and Suntide Refining Company are said to be studying isophthalic, but so far nothing is definite as to which firm might join Oronite and Amoco in the near future.

It's believed, however, that isophthalic demand, spurred by increased polyester resin use, could go as high as 60 million pounds five years hence.

Ethylbenzene recovery from mixed

—*Continued on page 54*

Coaltar Xylene Capacities

Alabama ByProducts	300,000 gals./yr.
Alan Wood Steel	100,000 gals./yr.
Allied Chemical	500,000 gals./yr.
American Cyanamid	200,000 gals./yr.
Armco Steel	250,000 gals./yr.
Bethlehem Steel	1,800,000 gals./yr.
Colorado Fuel & Iron	200,000 gals./yr.
Crucible Steel	100,000 gals./yr.
Detroit Steel	90,000 gals./yr.
Donner-Hanna	150,000 gals./yr.
Granite City Steel	50,000 gals./yr.
Great Lakes Carbon	30,000 gals./yr.
Indiana Gas	50,000 gals./yr.
Inland Steel	340,000 gals./yr.
Interlake Iron	110,000 gals./yr.
Int'l Harvester	150,000 gals./yr.
Jones & Laughlin	650,000 gals./yr.
Kaiser Steel	300,000 gals./yr.
Koppers	150,000 gals./yr.
Lone Star Steel	60,000 gals./yr.
Milwaukee Solvay	60,000 gals./yr.
National Steel	500,000 gals./yr.
Picco	100,000 gals./yr.
Pittsburgh Chemical	400,000 gals./yr.
Republic Steel	700,000 gals./yr.
Sharon Steel	50,000 gals./yr.
Tennessee Products Div.	50,000 gals./yr.
US Pipe	200,000 gals./yr.
US Steel	3,000,000 gals./yr.
Wheeling Steel	200,000 gals./yr.
Woodward Iron & Steel	200,000 gals./yr.
Wyandotte Chemicals	50,000 gals./yr.
Youngstown Sheet & Tube	500,000 gals./yr.
Total	11,590,000 gals./yr.

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Essential Oils, Aromatics

The announcement of a price rise effective July 1 for lemon oil and an actual advance in the price of sandalwood oil were noted among the essential oils. The lemon oil advance, roughly double the current listing, was announced by a relatively small producer, but speculation around the trade is that other producers will follow suit. The sandalwood advance is explained thusly: Whereas the price has been climbing for some time, dealers' reactions were mixed. Some of them continued to stock the oil and others discontinued their listings. There was a wide spread in price and, as of last week, one of the dealers, who had been quoting a low price, decided to stop handling the oil for the time being. Mathematically, the price rose $5 per pound.

Among the aromatic chemicals, three price changes were noted. Benzyl cinnamate advanced 50 cents per pound, ethyl cinnamate advanced 20 cents per pound and isoeugenol declined 30 cents per pound.

Both Bourbon and Mexican vanilla beans remained at their previously-quoted prices.

The 52nd annual convention of the Flavoring Extract Manufacturers' Association of the US will be held May 14-17 at the Savoy-Hilton Hotel, New York. Briefly, the events include a party, dinner dance, business session, golf tournament, technical symposium, president's reception and banquet.

Mr. Jack Mulligan is chairman. Those assisting him are Dr. A. S. Wendt, Messrs. Howard D. Smith, D. B. Daugherty, Guy C. Bates, Ray G. McCue, Bruce, L. Durling and Paul H. Manheimer.

The following information about soap imports into Singapore, is from Chemical & Rubber, published by the US Department of Commerce, Business and Defense Services Administration.

The Singapore Government imposed import duties on all kinds of soap effective September of last year. It excludes toilet soap, abrasive soap and synthetic detergents.

This marks the first time that the government has given tariff protection to a domestic industry.

Price Trends

Advanced

Sandalwood, $5 per lb.
Benzyl cinnamate, 50c. per lb.
Ethyl cinnamate, 20c. per lb.

Reduced

Isoeugenol, 30c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
144.08	143.39	143.49	146.61

For Current Prices see page 10

Essential Oils

Lemon—A bit of excitement was generated in this market when one of the West Coast producers announced he would double his price as of July 1.

From roughly $1.25 per pound, that particular company plans to go up to $2.50 per pound by mid-year.

None of the other companies went so far as to announce their own price advances, but several representatives speculated that they would very likely go along with this price rise. One company reported that it would have a price comment within two or three weeks.

The following unofficial reactions, however, were heard around the trade:

- "The price was so low, it couldn't go anywhere but up."
- "I expect the other West Coast companies to follow suit."
- "Advance! I thought there was a surplus of oil."
- "It's about time. The $1.25-$1.50 per pound spread is the lowest I can remember the price being since the depression."

(According to an individual company's price statistics, the price in 1936 was $1.25 per pound; in 1935 it was 70 cents per pound, and in 1934, 50c. per pound).

The current low price, which has been in effect since mid-February, 1960, has affected the growers on the West Coast to such an extent that the cooperative which represents over 70 percent of the lemon growers, has recently appealed to the United States Department of Agriculture for aid.

For one thing, this group has sought the help of the Secretary of Agriculture to protect US lemon growers from the imports of concentrated lemon juice. The group said that when domestic lemon products prices exceeded $30 per ton, concentrated juice imports built up rapidly. And when the domestic price was reduced, imports were negligible.

The spokesman said: "In spite of maximum efforts under the lemon marketing order to improve returns on the fruit marketed fresh, the continued inadequate returns on products fruit (juice, pectin and oil) prevent a reasonable over-all return to the lemon grower."

This group also asked the USDA to include lemons and lemon juice products in the department's food distribution program.

Their argument: "On the basis of the fact that total on-tree returns for California-Arizona lemons have declined from an average of $32.3 million annually for the period 1950-54 to an estimated $15.3 million for the year 1959-60, we believe the USDA should act favorably on these two requests from an industry which has never sought a subsidy in any form but which now finds itself in a serious predicament."

They pointed out the value of vitamin C in the diet, saying that undernourished people are almost invariably deficient in vitamin C which is essential to proper nutrition. They also mentioned that substantial quantities of concentrated lemon juice were included in the Lend Lease program during World War II.

Rosemary—Sales are reported steady and prices unchanged.

Spanish NF material remains around 97c. per pound and the technical grade remains at 50c. per pound.

Production season is near at hand, according to agricultural reports. Distillation in Spain usually takes place between March and July. If the demand is particularly good, the oil is sometimes distilled in the winter months prior to the regular season.

The oil is usually produced by peasants who operate their own stills. These same peasants do quite a bit of farming, so the distillation of rosemary oil is a side-light activity.

The yield is approximately one kilogram per 25 pounds of plant material during the summer. During the winter, however, yield is considerably lower.

Sandalwood—A few more dealers have stopped handling sandalwood oil because of its exceptionally high price, so that now the lowest quotation that can be found in the New York area is $26 per pound. The previously-quoted low had been $21 per pound. In some quarters, however, prices of $30 per pound are quoted.

With this recent advance the price of sandalwood goes substantially above its 9-year high as reported in the OPD 1961 Hi-Lo Chemical Price Issue. Previous to the current upswing, the price had fluctuated roughly between $9 and $16 per pound.

The price had been going up steadily when one of the aromatic companies announced they had developed a satisfactory substitute. This halted the price rises for several months, but of late, due apparently to scarcity of material, the price is once again on the move.

Expensive as the oil is, however, the Indians themselves still use it freely, according to an American film-maker just returned from that country. He says it is common practice for the natives to smear their bodies in order to make themselves more appealing to the opposite sex.

Aromatic Chemicals

Benzyl Cinnamate—From its previously listed price, $3.30 per pound benzyl cinnamate has advanced to $3.80 per pound with some dealers quoting as high as $3.90 per pound.

According to technical literature benzyl cinnamate is found in Peru and tolu balsams as well as in styrax.

It is used in the composition of heavy scents and as a fixative. Sometimes it is incorporated into flavors such as pineapple, honey and the various berries.

Ethyl Cinnamate—From its previous

—Continued on page 54

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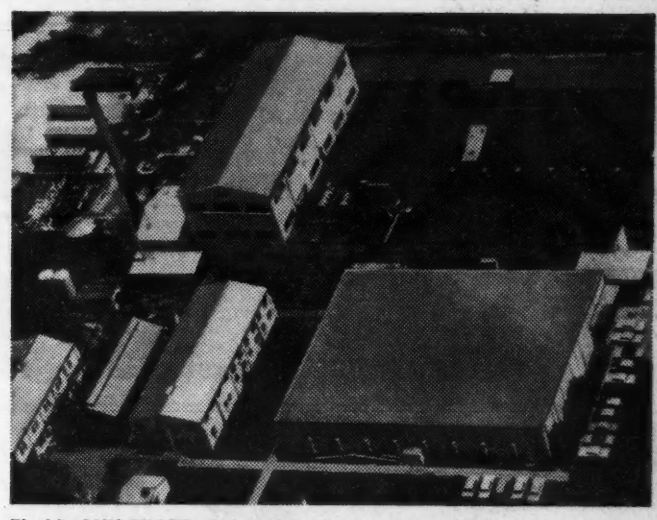
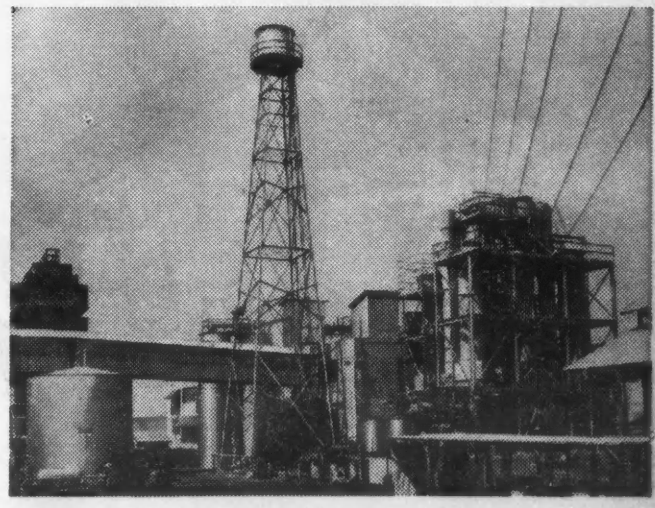


Florida SUN-FILLED citrus oils are produced at 3 Minute Maid plants — Plymouth (shown above), Auburndale and Leesburg, Florida.



California SUN-FILLED citrus oils are produced at Minute Maid's Golden Citrus plant at Anaheim, California.

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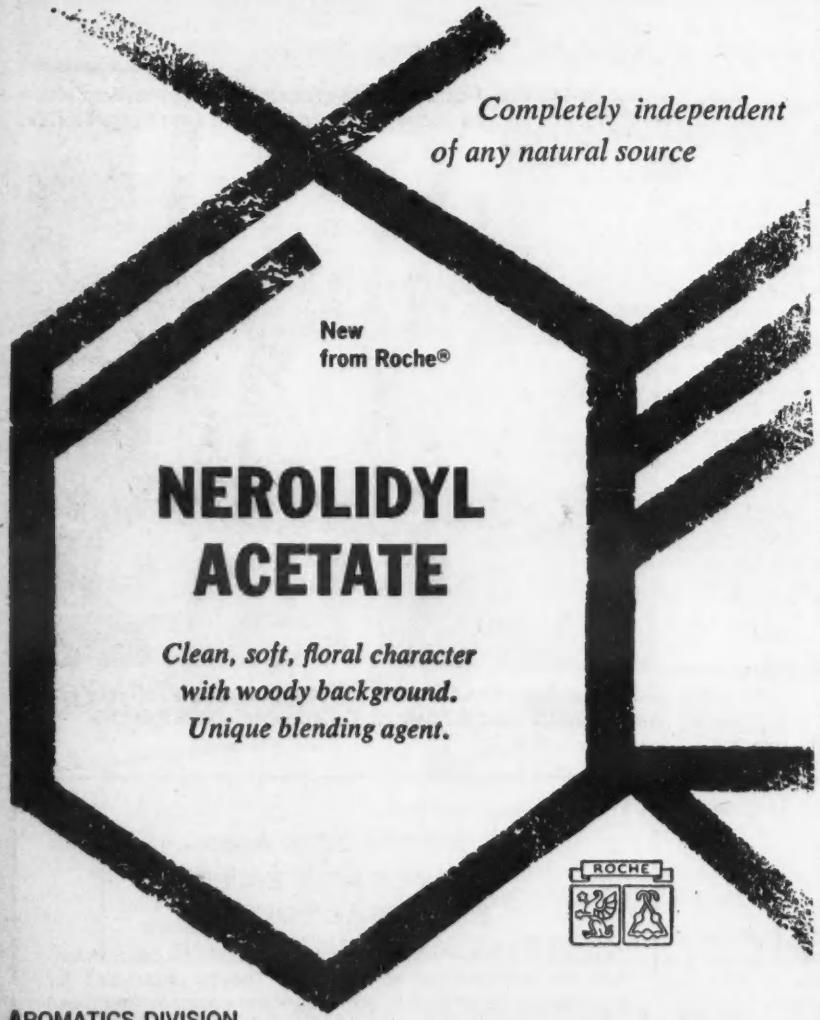

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Xylenes Capacity Set to Jump in 1961

OPD 'Depth' Report on Xylenes

—Continued from page 51

xylene streams is becoming more prevalent as producers of styrene which also separate xylene isomers decide to take advantage of existing raw materials.

Cosden Petroleum Division of W. R. Grace & Co. started the ethylbenzene fraction-to-polystyrene fad. Now, Sinclair, Suntide Refining and Monsanto Chemical are jumping on the bandwagon, along with Tennessee Oil & Chemical Company. Oronite has some xylene-derived ethylbenzene to sell.

But of a total of 1.5 billion pounds produced in 1960, xylenes-derived ethylbenzene looks like a drop in the bucket. It looks to most observers as if future capacity from xylene will be strictly a matter of close-to-the-vest economics and convenience.

The Case Against Separation

While profits and advantages look attractive to the petroleum producer which wants to separate xylene isomers, there is a definite faction among aromatics producers which puts a strong case against separation. Reasoning runs like this:

• **Ortho**—Its future is limited to contracts now in effect or being negotiated for phthalic anhydride plants overseas. But US producers want naphthalene, and when new petroleum naphthalene comes on stream overseas producers will prefer it.

• **Meta**—Isophthalic is growing now, but it has grown at the expense of phthalic, which has been in short supply. Consumption increase for iso could be severely blunted with free availability of phthalic at comparable prices.

• **Para**—Its future looks to be the most promising of the isomers. But there's always the threat of a move to toluene or benzene by terephthalic producers.

Further, there's always the threat that somebody will come up with a cheap process which could drop the price of para so sharply that producers with heavy equipment investment could be left holding the bag.

• **Ethylbenzene**—Take a look at those tall towers at a fractionating plant. The investment is quite high. In fact, it's generally accepted that it's cheaper to make ethylbenzene from ethylene and benzene.

There's a growing belief that the key to the future of xylene isomers lies with an installation like Amoco's at Joliet, whereby dibasic acids can be made without the installation of separation equipment.

Xylenes Report Being Reprinted

OPD's special "depth" report on xylenes is being reprinted and will be available shortly. Copies may be obtained at 35 cents each (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church Street, New York 7.

The company has had a heart-rending time with its plant, but every indication is that the kinks are working out. It can now produce phthalic, isophthalic, terephthalic and benzoic from one unit—and so far its posted prices have been cheaper than those of the competition.

Then, too, there is every indication that the benzene shortage is beginning to ease up. This could mean a heavier production of mixed xylenes from aromatics units and more downward pressure on prices of both raw material and finished isomers.

Ideally, the producer with the lowest production costs is most likely to survive. Practically, it's going to be hard to tell what will happen in the next two years, since any foresight will be obscured by the dust clouds of heavy competition.

Essential Oils

—Continued from page 52

listing, $3.15 per pound, the price of ethyl cinnamate has advanced to $3.35 per pound with the bulk of the quotations over the $3.50 mark.

Isoeugenol—A decline in price was noted. From its previous listing, $3.40 per pound, isoeugenol has declined to $3.10 per pound.

This aromatic is found in nutmeg, ylang ylang, champac and karokarounde oils. Its odor is spicy and reminiscent of cloves and carnations. It is used in floral scents and also in oriental-type scents.

Seeds and Spices

Basil—French extra triple sifted material has advanced in price. From its previous listing, 79c. per pound, it has gone up to 82c. per pound.

Celery—French material has come down in price from 36c. per pound to 35c. per pound.

Cinnamon—Seychelles material has dropped in price. From its previous listing, 17½c. per pound, it has come down to 16½c. per pound.

Dillseed—Indian dewhiskered material has come down in price from 17c. per pound to 16c. per pound.

Fennel—Indian recleaned material has dropped in price. From its previous price, 20c. per pound, it has dropped to 19c. per pound.

Nutmegs—Prices for both East and West Indian material remained at their previously quoted levels.

Paprika—Hungarian noble sweet material advanced in price from 28c. per pound to 30c. per pound.

Pepper—Both Malabar and Lampong black advanced in price. Both of them went up from 47c. per pound to 48½c. per pound.

Muntok white, on the other hand, declined in price. From its previous listing, 73c. per pound, it dropped to 71c. per pound.

Thyme—Spanish extra material dropped in price. From its previous price 12c. per pound, it dropped to 10½c. per pound.

Vanilla Beans—According to dealers in vanilla beans, there have been no price changes.

Bourbon material continues to range between $6.50 and $6.65 per pound; Mexican cut material continues to range between $7.25 and $7.50 per pound, and Mexican whole material continues to range between $7.65 and $8.50 per pound.

Corn Products Sets Up An Institute of Nutrition

Corn Products Company, New York, has established an Institute of Nutrition and has appointed Dr. Albert L. Elder as its first director. Dr. Elder, previously coordinator of research, last year served as president of the American Chemical Society, the first to be so honored from the food industry.

The new institute is expected to fulfill "the vital function of relating modern nutritional science to food processing, and apply such combined knowledge to the worldwide needs of the company," a spokesman for Corn Products says.

SAACI Chooses a V. P.

The board of directors of the Salesmen's Association of the American Chemical Industry has unanimously elected James E. Spencer of Harshaw Chemical Company vice-president of the organization. Mr. Spencer, SAACI president in 1959, fills the vacancy created by the elevation of Charles E. Griffith to the association presidency (OPD, 2/6/61).

CCDA's Thursday Agenda

—Continued from page 7

president of Arthur D. Little, Inc., Cambridge, Mass.

Finance, T. Graydon Upton, Inter-American Development Bank, Washington.

Economics, John D. Wilson, vice-president of Chase Manhattan Bank, New York.

The afternoon session will be given over to the analysis of a series of 1959 forecasts of chemical performance in various fields, including plastics, coaltar products, fertilizers, textiles, pharmaceuticals and pesticides.

The CCDA honor award will be presented that night at the association's annual banquet.

Givaudan's Sales Conference Held

Givaudan-Delawanna, Inc., and its associate companies — Givaudan Flavors, Inc., and Sindar Corporation—brought together all of its sales personnel in the United States and Canada last month for a sales meeting. The four-day conference was held at New York's Manhattan hotel.

Coal Chemicals

—Continued from page 50

East; drums, carlots, 30½c. a pound, same basis and drums, less carlots, 31½c., same basis.

6-Chloro-2-Nitrotoluene—Price for technical grade material, solid, drums, freight allowed, will be raised 4½c. to 25c. a pound effective April 1.

2,6-Dicholorobenzalchloride — Material will be increased 20c. to the level of $2.20 a pound on April 1.

F Salt—Paste material, technical grade, in drums, works, will be increased 20c. on April 1 to $2.50 a pound.

Laurent's Acid—Price in barrels will be 17c. higher on April 1. New schedule is 87c. a pound.

Melamine—Sales of melamine dishware are expected to rise 10.9 percent this year, according to the Melamine Council. Increase in 1960 was pegged at 13.1 percent.

Representing 32 US and Canadian plastic dish manufacturers, the council estimates 1960 sales at 150 million dishes. One out of four families now use melamine dishware, the council adds.

2,7 Naphthalene Disulfonic Acid Disodium Salt—Price is being increased 10c. to $1.30 a pound effective April 1.

o-Naphthionic Acid—An increase of 10c. to the level of $1.90 a pound will become effective April 1.

a-Naphthylamine — Price in drums, freight allowed, will be increased 5c. to 57c. a pound on April 1.

Neville and Winther's Acid—From the current $1.40 a pound, in drums, freight allowed, a major producer is hiking material 10c. to $1.50 a pound effective April 1.

5-Nitro-2-aminotoluene — Price will be increased 15c. a pound to a level of $3.45 effective April 1.

m-Nitroaniline—Crystalline material in drums, freight allowed, is to be increased to $1.27 a pound on April 1, a hike of 12c.

Picric Acid—Technical grade material in barrels will advance to 50c. a pound on April 1, an increase of 6c. Price of NF grade is unchanged at 85c. a pound.

2 R Acid—Price will be increased to $3.75 a pound on April 1, a hike of 25c.

Sodium Naphthionate—Price will be increased to 77c. a pound, April 1, an advance of 5c.

Coal Chemicals*

Estimated output of coal chemicals recovered from cokeoven operations during the week ended March 4, were as follows:

Ammonia liquid	lbs.	498,191
Ammonium sulfate	lbs.	20,951,713
Benzene	gals.	2,002,241
Coaltar	gals.	11,043,241
Crude chemical oil	gals.	322,662
Solvent naphtha	gals.	64,580
Toluene	gals.	452,062
Xylene	gals.	129,161

* Based temporarily on 1960 theoretical capicity.

Chemical Research Outlay Is Reported at $1 Billion

The expanding chemical industries in the US spent approximately $1 billion on research and development in 1960, and continuing growth in this area is in prospect, says Business & Defense Services Administration.

The latest figure, reported in the agency's monthly "Chemical & Rubber Industry Report," compares with $784 million in 1958 and $512 million in 1956.

Federal financing, the BDSA survey notes, accounted for 30 percent of the research and development expenditures in the industrial chemicals field, with a substantial part devoted to rocket and propellent chemicals.

Rubber product companies trimmed their research and development outlays from $107 million in 1957 to $88 million in 1958, according to the survey.

Vitamix, New Drug Firm, Registers Stock Offering

Vitamix Pharmaceuticals, Inc., Philadelphia, has registered an issue of 100,000 shares of its common stock with the Securities & Exchange Commission.

The company is the successor by merger to Lustgarten Laboratories, Inc., and Vitamix Corporation. It compounds, packages and sells ethical pharmaceuticals, proprietary drugs and vitamin products. Sales are promoted primarily by catalog.

Net proceeds from sale of the stock offering will be initially added to working capital and be available for general corporate purposes. The company anticipates that a portion of the proceeds will be used to finance an expansion of its sales organization and an increase in its product development activities.

SOCMA Sets Luncheon Date

Synthetic Organic Chemical Manufacturers Association will hold its monthly luncheon meeting tomorrow (March 14) at the Roosevelt hotel in New York. Maj. Gen. Marshall Stubbs, featured speaker, will discuss "The Role of the Chemical Corps and the Chemical Industry in National Defense."

Magnus Holds Sales Conference

Magnus, Mabee & Reynard, Inc., New York essential oil firm, held a sales and technical conference last month at the Warwick hotel in that city. Theme of the three-day parley was "Make Sales Hum in '61."

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Drugs, Fine Chemicals

In two rather surprising developments late last week, price advances were announced for USP saccharin and caffeine, products which have been hard hit in recent years by large volume imports. No formal statements accompanied the actions so any explanation must be speculative. It may be, for example—as a trade source suggested some weeks ago (OPD, 2/13/61)—that importers' replacements costs are up, thus forcibly narrowing the spread between foreign and domestic prices. And with manufacturing costs steadily rising, US manufacturers of saccharin and caffeine—and, frankly, there are today very few left—decided to take advantage of this fact.

Price Trends

Advanced
Saccharin, gran., powd., 10c. per lb.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
59.28	59.28	59.27	60.35

For Current Prices see page 10

Saccharin prices were boosted 10 cents a pound across the board effective immediately on spot and April 1 on contract. This established the schedule at $1.50 a pound for 1,000 pound lots of the granular material and at $1.53 and $1.55 a pound, respectively, for the insoluble and soluble powders.

Caffeine prices go higher today (March 13). New postings are $2.40 a pound for the anhydrous product and $2.25 for the hydrous, the increases amounting to 30 cents and 29 cents a pound.

The quite static quality of the piperazine market, it was learned, indicated price stability to some people in the trade. But uptrending manufacturing costs can hardly be overlooked today and it was for this reason that prices were advanced last fortnight, according to a spokesman for the initiating firm.

Trade sources say it is difficult to estimate current requirements for piperazine salts because of the peculiar nature of the business. One man noted, for example, that veterinary supply houses have been known to export material which they, in turn, have purchased from a basic producer.

The Tariff Commission reports 1959 production of piperazine derivatives at 474,000 pounds, sales at 439,000 pounds. This is far below the 1958 record; that year, according to statistics compiled by the Manufacturing Chemists' Association, production was 795,000 pounds and sales were 729,000 pounds.

Major markets for piperazine are human and animal anthelmintics, with veterinary requirements, as one would hope, the larger of the two. Practically all material is made synthetically and has been for the past several years.

Bacitracin—Routine demand is reported though this isn't to say that domestic and foreign requirements are slow. On the contrary, both markets have been strong over the past several months. Foreign shipments in December, for example, totaled 11,134 million units, up from 4,545 million units a month earlier.

Gelatin — Gelatin producers entered February with an inventory of 13,375,000 pounds. This compared with 12,707,000 pounds a month earlier and 11,590,000 pounds a year earlier.

The stock build-up, despite a drop in production, reflected a slight decline in shipments, as seen from statistics prepared by the Census bureau from reports submitted by all known manufacturers of gelatin.

Output of gelatin in January was 5,161,000 pounds, down from 5,243,000 in December but up slightly from 5,040,000 in January 1960. Of the total, 4,453,000 pounds were manufactured from hides while the remainder (708,000 pounds) was ossein-derived.

Classified by type, production was, in thousands of pounds (December 1960 production in parenthesis): edible 3,539 (3,963); technical 202 (262); pharmaceutical 529 (254); photographic 891 (764).

January shipments amounted to 4,493,000 pounds, down from December's 4,618,000 (revised), and January 1960 shipments of 4,680,000 pounds.

By type, shipments were, in thousands of pounds: edible 3,389 (3,228); technical 240 (161); pharmaceutical 341 (288); photographic 523 (941).

Stocks at January's end, totaling 13,375,000 pounds, comprised (in thousands of pounds): edible 7,410; technical 972; pharmaceutical 1,373; and photographic 3,620.

Quinine—On March 14 at 11 a.m. at its Washington, D.C., headquarters, General Services Administration will open bids on one lot of quinine weighing approximately 2,759,508 ounces. This is the first of three offerings. At later sales, about 1.5 million ounces of hydrochloride powder (bids to be opened March 21), and 9.5 million ounces of sulfate powder will be put on the block. All of this material has been declared excess to national stockpile requirements.

In another development which may affect domestic markets for quinine, the State Government of Madras has decided to cut cinchona acreage from 9,600 to 8,000 acres. The move reflects the success of the National Malaria Eradication Program and the availability of synthetic preventive and therapeutic antimalarial products, according to the US Department of Commerce.

Total output of cinchona derivatives by Madras State is estimated unofficially at 40,000 pounds of quinine sulfate and about 28,000 pounds of cinchona febrifuge, which is believed to be totaquine (total crystallizable alkaloids of cinchona).

Streptomycin — While official postings are unchanged, there's scattered reports that less than the $30-a-kilo schedule is being quoted in some instances. On the east coast, stability appears to be generally the case, but elsewhere prices are rumored to be lower at $28.50 to $29 a kilo.

It's unlikely, however, that the overall market will weaken because several suppliers, long familiar with the cost-price squeeze, are seemingly determined to maintain prices and profits where they exist, at current levels.

DHS, hit by tighter government controls last fall, has suffered a sales loss as far as human requirements are concerned but for veterinary applications it's still being used in large quantities. Foreign demands have also drained off a lot of material that otherwise could have been excess to domestic needs.

Vitamin B_{12}—The leading domestic producer of B_{12} has filed law suits in three states (New York, New Jersey, and California) charging several firms and individuals with patent infringement.

This action follows a series of offensive maneuvers aimed at creating market stability. Earlier efforts apparently failed to accomplish the objective, thus requiring legal proceedings.

In the past several months, B_{12} prices have been reduced in successive stages but, nonetheless, below-the-market-price competition continues to be felt.

Botanicals

Arabic Gum — Imports of arabic gum during the first 9 months of 1960, at 16.9 million pounds, were 17 percent below those for the 1959 period. Less one misconstrue this as an indication of plummeting demand, however, it is necessary to point out, as BDSA has, that calendar year 1959 imports were the largest on record and 14 percent above those for 1958.

Two countries accounted for September arrivals; the Sudan shipped 3.2 million pounds and Nigeria, 110,000 pounds.

On spot, quote on amber sorts is 21c. to 23c. a pound. Steady demand is noted.

Karaya Gum—Karaya imports through September 1960 were running equal to th e in the comparable 1959 period and will probably top the 1959 calendar year volume of 7.1 million pounds, the Commerce department reports.

Spot prices range from 48c. to 50c. on the NF No. 1 gum; 43c. to 45c. on the No. 2; and 37c. to 40c. on the No. 3.

Locust Bean Gum—Arrivals of locust bean gum during the first 9 months of 1960 declined 32 percent from the com-

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Drugs, Fine Chemicals

parable period in 1959, according to Commerce department reckoning.

Four countries supplied material in September: Portugal, 190,000 pounds; The Netherlands, 187,600 pounds; Italy, 142,800 pounds; and Spain, 32,900 pounds.

Tragacanth — Tragacanth remains a strong market, dealers here on spot report. Good inquiry, rather than any shortage of stocks at source—a quite common strengthening factor among botanicals and gums—assumedly explains the situation.

The Commerce department, through its Business & Defense Services Administration, notes, for example, that imports of tragacanth for the first 9 months of the year exceeded those in the comparable period the year before by 56 percent. In fact, January-September inshipments surpassed totals for calendar year 1959 and 1958, which were about equal in volume.

Drug & Fine Chemical Briefs

DRUG CONTROLS APPETITE: "Plegine," just introduced by Ayerst Laboratories, New York, is reported to firmly suppress the appetite with a paucity of side effects and a virtual absence of CNS or cardiovascular complications. It is recommended in the management of simple obesity as well as in specific cases where excessive appetite or weight aggravates associated conditions.

MEDICAL FILM AVAILABLE: The Oxygen Therapy department of Linde Company, a division of Union Carbide Corporation, New York, has prepared a film that reviews the basic physiology of respiration and demonstrates clinical recognition of the major types of hypoxia. It is available on free loan.

FLEMMING GOES WEST: Arthur Flemming, former Secretary of Health, Education & Welfare, becomes president of the University of Oregon, April 16. No stranger to the campus, Flemming twice served as president of Ohio Wesleyan University.

INFRINGEMENT CHARGED: Merck & Co., Rahway, N. J., has filed law suits in three states to recover damages for alleged infringement of its patents on vitamin B_{12}. Four complaints were filed in New York, three in New Jersey, and a civil action was initiated in the Federal District Court of Southern California.

PROJECT SET: Parke, Davis & Co. will soon begin construction of a $4 million surgical dressings manufacturing plant at Greenwood, S. C. The project will include an administrative office area, a production and storage unit and maintenance facilities. Completion is targeted for the end of 1961, the Detroit, Mich., firm says.

PEDIATRIC PRODUCT INTRODUCED: "Pediatric Piptal Antipyretic," a new product designed for the relief of fever, pain and spasm associated with gastrointestinal disturbances in infants and children, has been introduced by Lakeside Laboratories, Milwaukee, Wis. Available on Rx only, it is packaged in 30 cc. dropper bottles. Price to druggist is $2.10.

PRODUCTION STARTED: Production of calcium propionate has been started at the New Jersey facility of Certified Proteins Corporation. Technical literature about product and process is available from the firm's headquarters at 320 West Ohio street, Chicago 10, Ill.

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C-61-1

Stauffer Readies Start-Up Of Electron Beam Furnace

Stauffer Metals Division of Stauffer Chemical Company is getting ready to start up its new electron beam furnace at Richmond, Calif.—reportedly the world's largest.

The recently-completed furnace, officially rated at 300 kw, is capable of refining and casting ingots of refractory metals up to eight inches in diameter and forty-two inches in length, Stauffer says.

For most fabricating technics, this is said to be the optimum size, giving both ease and flexibility of handling as well as low cost operation.

It is the first such furnace constructed for high output capacity—about 30,000 pounds a month—and incorporates several specially designed new features, the company says. These include vacuum load locks, ingot casting and unloading systems and feed-material handling equipment.

Polymers Talk Wednesday

Carl A. Setterstrom, marketing vice-president for Rexall Chemical Company, will discuss the marketing of polymers Wednesday (March 15) before the Chemical Marketing & Economics Group of American Chemical Society's New York Section. The meeting will be held at the Brass Rail Restaurant, Fifth Avenue and 43rd Street, New York, starting at 6:30 p.m.

Berkshire Bought Up

—Continued from page 3

space at Vitro Chemical Company, Chattanooga, Tenn.

Berkshire is an importer and exporter of industrial and agricultural chemicals, non-metallic minerals and ores. It also represents domestic producers of these materials. In addition to headquarters in New York, there is a branch office in Chicago and an agency in San Francisco.

Mr. McAllister says that the Berkshire business will continue as presently constituted.

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Aliphatic Organics

Organic chemicals production had its ups and downs last year. Based on preliminary totals compiled by OPD, output of seven of the fifteen major chemicals for which statistics are reported monthly by the Tariff Commission rose above 1959, while six declined substantially and two remained at roughly the same, yet lower, levels. Percentagewise, acetic acid and acetone, up 94 million and 25 million pounds respectively, scored the biggest gains. Other chemicals in the up column: butadiene, carbon tetrachloride, ethylene glycol, methanol, and perchloroethylene.

After following a consistent downtrend throughout the year, carbon disulfide and ethyl acetate, not surprisingly, turned in the poorest performances. Responsible for the 66 million pound decline in carbon disulfide output, perhaps, was a narrowing market for rayon in tire cord.

For ethyl acetate, the increasing acceptance of newer and in some instances specialty-type solvents may explain the 12-million-pound production loss. If so, continued disinterest in this chemical is not unlikely.

While production of both types of glycerine rose last year—to a combined total of 301.8 million pounds—it is felt that glycerine from propylene "took a definite lead in output volume as compared to natural glycerine." This is one of the salient developments reported by the Glycerine Producers' Association in its just-issued 1960 Glycerine Summary. Other items:

- Consumption of glycerine last year, at a new high of 278.3 million pounds, increased most significantly in these fields: cellophane, tobacco, mono- and di-glyceride emulsifiers.
- Imports of glycerine, primarily crude, rose as the year progressed and hit 14.6 million pounds.
- Exports, primarily refined, were high early in the year and totaled 20 million pounds.
- Net balance of exports over imports dropped to 5.4 million pounds from 11 million pounds in '59.
- Stocks, continuing the rise that began in September 1959, reached 56.2 million pounds by year's end, up 18.1 million pounds.

Output of acetic anhydride, acrylonitrile, formaldehyde, and trichloroethylene also declined last year but not to an alarming extent. Holding steady were ethanolamines, off about 1 million pounds, and pentaerythritol, off a mere 137,000.

Acetylene—Producers of acetylene have got a couple of things to worry about. The first is the inevitable—or so it would appear—loss of a major customer and the second is increased competition and, as likely as not, lower prices. Both fears are more than just possibilities.

Last May, two major US firms disclosed plans for a joint venture that would make them co-producers of 80 million pounds of acetylene yearly. Then in November, it confirmed its intention by announcing that a plant site had been selected near Geismar, La., and noted further that its new facility, one of the biggest of its kind as designed, would be completed in 1962.

But more disturbing to current acetylene producers, perhaps, was the announcement late last month that one of their biggest customers was back-integrating, and presumably could supply its own requirements internally by early 1963.

The firm's disclosure that its new facility, to be located at Montague, Mich., near its neoprene plant, would have a capacity in "excess of 50 million pounds annually" spurred speculation that someone was going to lose some business. Later reports indicated that this was so. It was also learned that the firm had renegotiated some contracts through 1968 at more favorable prices.

Calcium Propionate—Additional capacity became available last week with the debut of a new producer. The firm announced that it had started production at its New Jersey plant "under a rigidly controlled process utilizing specially designed equipment and techniques."

In an earlier development in this market, a major producer—and later a second—announced a 2½c. a pound advance for both calcium and sodium propionates, setting both prices at 37c. a pound, any quantity, delivered in the East (west coast prices are 3c. higher).

In as much as a price decline usually precedes the debut of a new producer in many areas of the chemicals business, the price increase is just a bit surprising. It could reflect, of course, an expanding market and a less pressing need to encourage new sales.

Calcium propionate is used as a mold and rope inhibitor in all types of breads, rolls and brown-and-serve items.

Glycerine — January production of crude and synthetic glycerine amounted to 22.7 million pounds, up 1.7 million pounds from December, but down 2.9 million pounds from January 1959.

Output of all grades of refined glycerine was 23.9 million pounds in January, up 14.4 million pounds from the previous month, according to statistics just issued by the Commerce department and relayed to OPD by the Glycerine Producers' Association.

On January 31, crude and refined glycerine stocks held by producers totaled 58.6 million pounds, up 2.4 million pounds from December and up 22 million pounds from the end of January 1960.

A breakdown of the figures shows that

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
130.53	130.53*	130.51	132.34

* Revised.

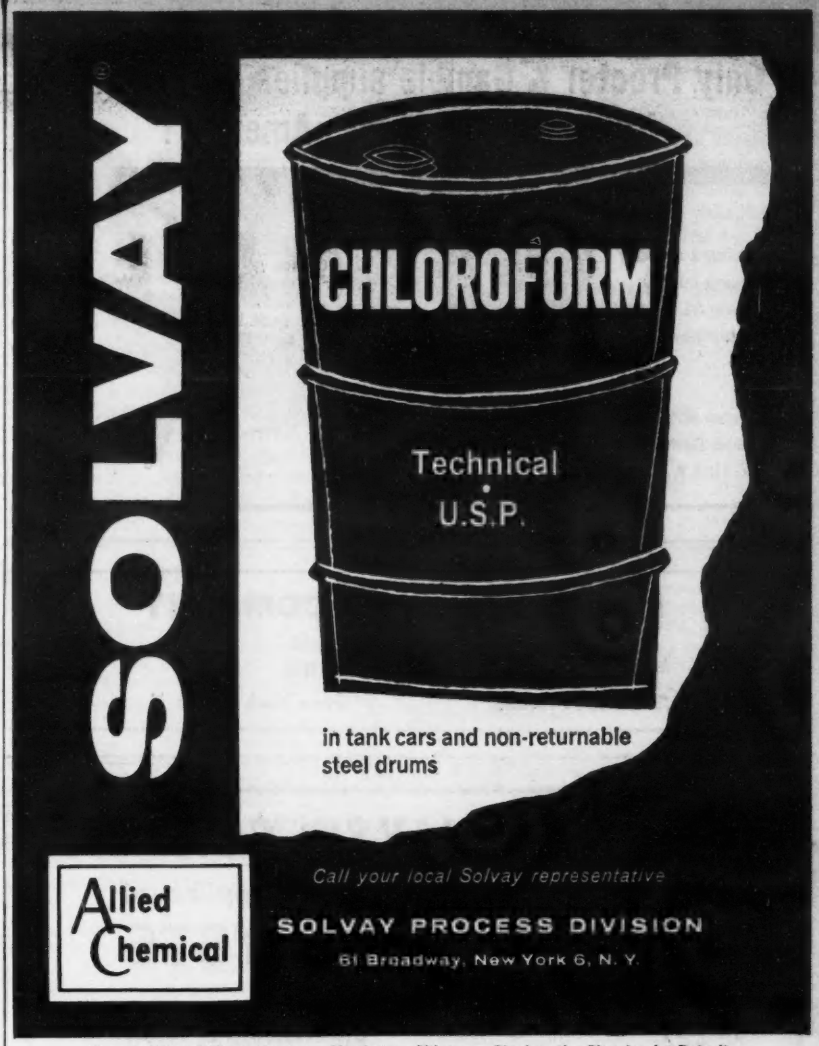
For Current Prices see Page 10

Organic Chemicals Output: 1960

The following figures, in thousands of pounds, represent output of specified organic chemicals in 1959 and 1960,* as reported by the Tariff Commission.

	1960*	1959
Acetic Acid:		
Synthetic	742,895	648,720
Natural (wood distillation)	**	—
Acetic anhydride	1,063,664	1,096,677
Acetone	761,188	736,209
Acrylonitrile	215,396	232,253
1.3 Butadiene (rubber grade)	1,916,971	1,816,122
Carbon disulfide	496,949	563,138
Carbon tetrachloride	372,577	367,847
Ethanolamines (Mono-, di-, and tri)	123,663	124,812
Ethyl acetate (85 percent)	88,575	101,027
Ethylene glycol	1,298,986	1,214,550
Formaldehyde (37 percent by weight)	1,700,568	1,750,218
Methanol:		
Synthetic	1,971,209	1,759,182
Natural (wood distillation)	**	—
Pentaerythritol	64,000	64,137
Perchloroethylene	208,905	202,992
Propylene glycol	**	151,510
Trichloroethylene	352,141	360,223

* Based on monthly reports.
** Incomplete data
A dash (—) indicates data not reported.



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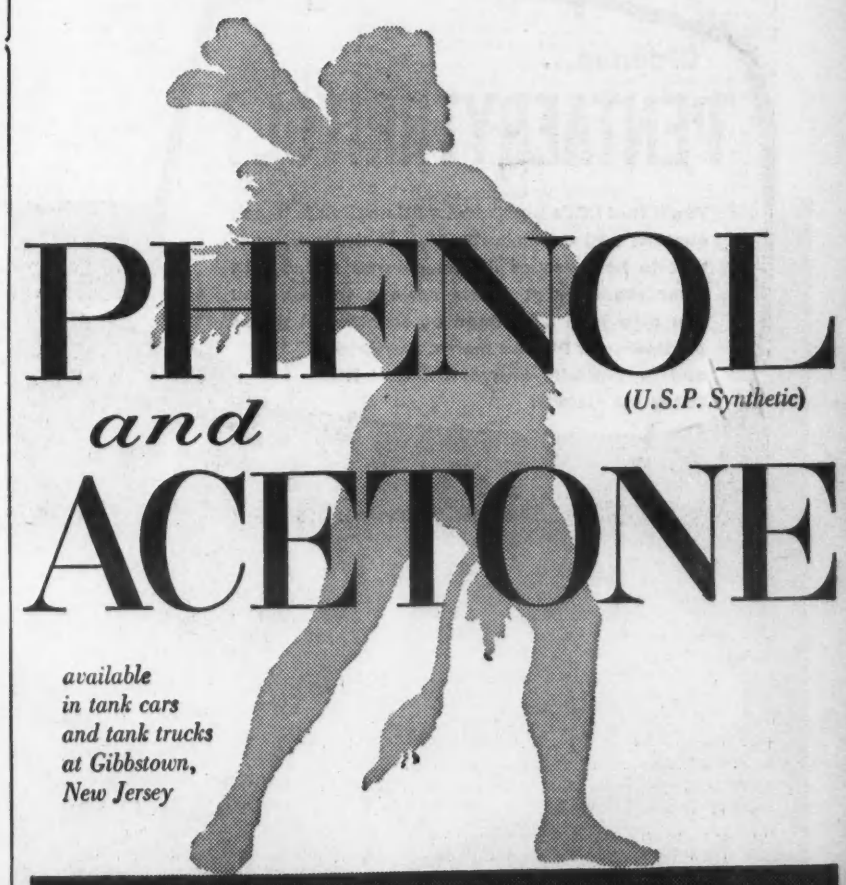

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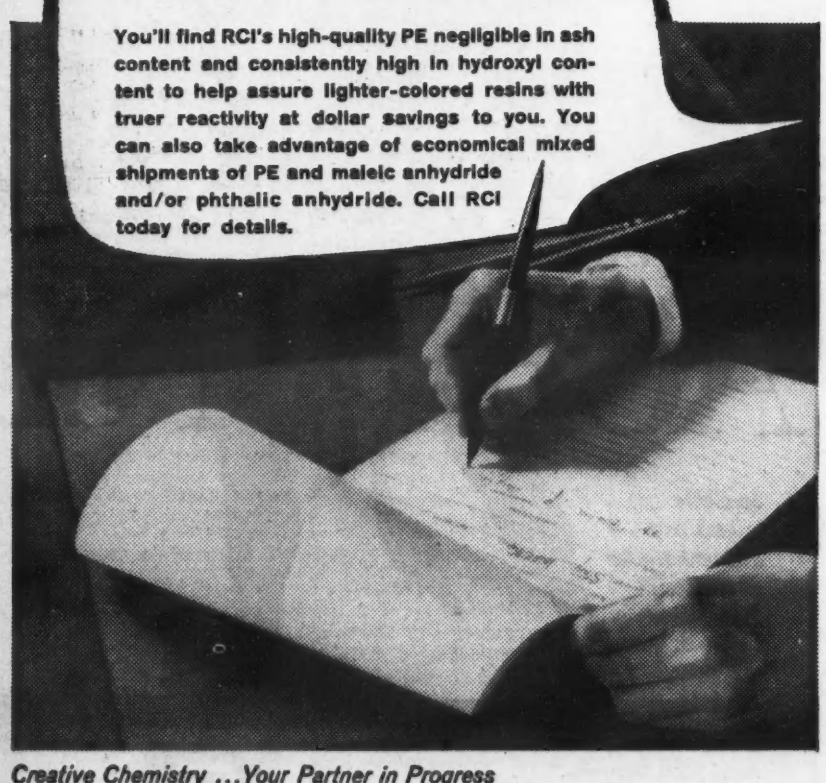

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Aliphatic Organics

crude and synthetic glycerine stocks were 25.8 million pounds, down 1.5 percent from December, while stocks of all grades of refined glycerine were 32.8 million pounds, up 9.3 percent from the preceding month.

Pentaerythritol — Output of pentaerythritol in 1960 was 64,000,124 pounds, according to a tabulation of monthly statistics issued by the Tariff Commission. This is only slightly lower than '59 output of 64,137,000 pounds, a record high.

An analysis of the monthly reports shows that PE production hit its peak in March (at 5,800,057 pounds) and thereafter declined until the next high of 5,730,012 pounds was reached in August. July's figure (3,953,449) represented the year's low.

Although it may only reflect producers' desires to keep year-end inventories at a minimum, it is nonetheless a fact that production was relatively low in November, and rose only slightly in December.

Within the past month — to bring the market story up to date—trade sources have noted an intensely competitive market and isolated price fluctuations. Most found, however, that demand was overall strong despite the fact that buyers were reluctant to purchase for more than immediate requirements. Rush orders were said to be quite common but no trouble meeting these short-notice requirements was encountered because stocks were fully adequate.

Sorbitol—The major US producer of sorbitol sends word of the rapid gains made by its USP sorbitol solution in cold syrups and other liquid cold preparations, an estimated 3 million gallon market this year. Assumedly, its product is crowding out such competitors as sugar syrup, glycerine, alcohol and propylene glycol.

The firm says that its USP sorbitol solution is already a part of many leading cough syrups, and states optimistically that it "will undoubtedly take its place in virtually every new or improved product of this nature in the future."

Sorbitol, which acts as the liquid vehicle or carrier for the medicinal ingredients, vitamins, etc., in the product, is reportedly gaining in this market because it affords good taste and good mouthfeel; is economical and anti-cariogenic; inhibits crytallization, and acts as a stabilizing agent.

Trichloroethylene — At an estimated 352,140,593 pounds, trichloroethylene production last year was approximately 8 million pounds below the '59 level. What happened? Two handy explanations come to mind.

The first and most obvious is competition from imported solvent. The second is a decline in activity in those industries where the solvent is used for metal-degreasing. These would include both automobiles and aircraft.

True, the decline of 8 million pounds is nothing to get particularly excited about, but with the large amount of lower-priced foreign material entering US ports each month, at least one manufacturer appears concerned enough to take cost-cutting steps. This firm, which has reported an improved and cheaper manufacturing process, will consolidate its activities at a new Niagara Falls plant sometime this year.

Late in December, the same firm took an initial step toward stabilized prices with the announcement of a 1½ cent a pound reduction. This set the tankcar price at 11¾c. a pound, where it remains today.

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Trade Name Chemicals

Polymeric Plasticizers Are Selling At Rate of 30 Million Pounds/Year

Sales of polymeric plasticizers—reaction products of polybasic acids and polyhydric alcohols—are currently estimated to be running at about 25-30 million pounds annually. Growth rate has been steady but relatively slow, since economics are against any sudden burgeoning in the demand curve. But for specialty plasticizer applications requiring low volatility, strong resistance to migration and low extraction by oils, consumers are ready to pay the average 40-cents-a-pound price that polymerics bring. Producers do not see any sizable price cuts in the offing and point out that no attempt is made to compete with such large-volume monomerics as dioctyl phthalate, now priced at 26½ cents a pound.

Producers of polymerics, or polyester plasticizers as some trade sources prefer to term them, are well established in the field. Firms such as Rohm & Haas Company, Archer - Daniels - Midland Company, Emery Industries, Inc., and Eastman Chemical Products, Inc., see no new entries in the polymerics arena, although all have active research teams at work.

Emery, with one commercial product available ("Plastolein 9720"), has several more in the hopper that are now classified as development products.

Oil Epoxides Gain Steadily

Practically all companies have oil epoxide products which are priced at about 32c. to 36c. a pound and have good permanence properties as well as contributing to heat and light stability. The epoxidized oils are incorporated at a concentration of roughly ten parts per hundred parts of resin and are generally used as secondary plasticizers.

Based on molecular weight it is difficult to distinguish between a high molecular weight monomer, a semi-resinous material, and a true polymeric. Polymerics are usually designated as polyesters of azelaic or sebacic acids with glycols, such as propylene glycol, terminated with long-chain fatty acids.

The bulk of commercial products are based on low-cost (32¼c., delivered) adipic acid with six carbons in its chain. Nine-carbon azelaic acid is 40c. a pound and 10-carbon sebacic acid lists at 65½c. a pound on a works basis.

Big outlet for polymeric plasticizers is in polyvinyl chloride, which in turn goes into calendered film and sheeting, electrical insulation and refrigerator gaskets and door linings.

Sources estimate that polymerics make up about 8 to 10 percent of the more than 300 million pounds of plasticizers that go into polyvinyl chloride annually.

Film and Sheeting Major End-Use

Biggest use is in calendered film and sheeting which amounted to nearly 150 million pounds in sales last year. All vinyl film does not make use of polymerics, but in applications such as draperies, bathroom and kitchen curtains, shower curtains, electrical tapes, and nursery goods, the permanence properties of polymerics make them highly favored.

These applications for vinyl film and sheeting lean heavily on polymeric plasticizers:

- Plasticizers for vinyl liners for draperies must be resistant to extraction by trichloroethylene, used in dry cleaning, and resistant to heat from radiators. Polymerics work particularly well in this type of application.
- Baby pants and liners for cribs, as well as other nursery goods, must be washed frequently. Some plasticizers cannot take repeated soaping and rinsing. Not so the polymerics.
- In electrical tapes, specifications for heat resistance are higher than ever before, thus calling for plasticizers resistant to migration to the surface where it subsequently vaporizes or is washed or wiped away.
- In gaskets and vinyl door linings for refrigerators, the higher molecular weight of polyester plasticizers means good resistance to migration.

This is important where the vinyl may come in contact with a polystyrene door panel, and migration of plasticizer could have a crazing effect on the polystyrene. Use of polymerics in this application also assures an odor-free refrigerator.

Despite their highly desirable properties, most sources do not feel that polymerics will move into vinyl upholstery for automobiles in big volume.

With a differential of 20 to 25c. a pound over dioctyl phthalate, it's estimated that a "whole-hog" switch to polymerics would increase the automobile producer's cost about $10 per 150 pounds of product used.

In addition, the low volatility coupled with good low-temperature flexibility, wanted by car makers, is almost an impossible combination, chemical men report. A more likely upholstery application for polymerics is in furniture where low-temperature flexibility is not a factor.

Polyesters Vary Widely

Another consideration in the auto application is the fact that polyesters have no uniform molecular weight. Weight can be plotted in the familiar bell-shaped form with what are termed "light ends." These light ends are just as prone to volatilization (causing fogging) as are other types of plasticizers.

Polymerics are compatible at any concentration level. In most cases they comprise less than 50 percent of plasticizer content, but there are some applications which require plasticizer concentration to be 100 percent polymeric, sources say. Polymerics are frequently used with phthalate-type monomeric plasticizers.

For the near future, producers expect increased use of polymerics in electrical applications. This will be particularly true where plasticizer resistance to high temperatures is so much more exacting, as in supersonic aircraft and missile and rocket devices.

Coated Fabrics Trend Continues

A continued trend to "leather-like" vinyl outer wear where polyester plasticizers in the vinyl formulation extend the life of the plastic and will not wash out or migrate to the surface will benefit polymerics.

Rohm & Hass, generally acknowledged leader in the field, markets a full line of plasticizers under the "Monoplex" and "Paraplex" trade names.

Prices on "Paraplexes" range from 40¾c. to 76c. a pound. High-molecular-weight products are "G-25" (m. wt. about 8,000) and "G-54."

Comparison of properties of "G-25" and dioctyl phthalate indicates percentage loss through volatilization, and extraction with oil and gasoline for the polymeric ranged from 0.2 to 0.5 percent while for DOP the range is 8 to 19 percent.

R&H also manufactures "Paraplex

—Continued on page 73

Auto Makers Seeking Non-Fogging Plastics

Wanted by Detroit: non-fogging plastics.

The car manufacturers have discovered that those foggy windshields are caused by the volatilization of plasticizer from overheated automobile vinyl upholstery.

But fogging can be due to other things. One auto maker is reported to have set out two test cars, one with upholstery and one without. Both cars fogged. It was found that the car without upholstery had an acrylic-type lacquer on the dashboard which contained a small percentage of volatile component. Thus, the fogging.

The problem has grown to such proportions that, last year, Ford Motor Company told its suppliers that it will use non-fogging vinyls only. General Motors Corporation is currently reported to be setting up similar specifications.

Petroleum Derivatives

Increase in export prices of mineral oils and petrolatums, made effective March 1, is a harbinger of similar action in the domestic market according to trade observers. Prices in this area of the market have been firm for well over a year while production costs have skyrocketed. Not only is labor a culprit but increased costs for raw oils, chemicals and filtering mediums are cited by producers as factors which may lead to a price adjustment. Demand for white mineral oils, petrolatums and petroleum sulphonate continues well sustained.

Aromatic solvents are unchanged. Despite the downturn in styrene demand and added production facilities, benzene continues in short supply. Toluene is reported moving briskly while xylene interest remains centered in the fractions, particularly ortho.

Paraffin and microcrystalline waxes continue steady and unchanged.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
103.74	103.74	103.74	103.82

For Current Prices see page 10

Aromatic Solvents

Benzene—Demand continues strong.

Despite recent weakening in styrene demand—estimated at 15 percent by trade sources—the cut is not deep enough to have the effect of freeing up shortened benzene supplies.

Added supply has become available since the first of the year although some trade observers claim much of the material is destined for overseas and will do little to alleviate the domestic shortage.

Some trade sources contend, however, that material is showing signs of becoming more available and that before the year is out a favorable balance will be a reality.

Toluene—Brisk activity is reported by toluene producers.

Material is reported moving into production of benzene and exports in substantial volume.

Market remains relatively unchanged, however, with prices competitive with coaltar toluene.

Xylene—Interest remains centered in the fractions.

Solvent applications remain restricted on the basis of lagging auto and appliance production.

Trade sources comment that climbing naphthalene production and increased import volume may put a crimp in orthoxylene for use in phthalic anhydride.

Commercial petroleum naphthalene facilities only shortly on stream are reported to be yielding high purity naphthalene, superior to that of coaltar material.

As this material becomes more widely available it may be presumed that orthoxylene will start to be edged out of the position it usurped when naphthalene originally became tight.

LPG's

Output of lpg's gained 5 percent in 1960 according to data from Bureau of Mines. Ethane production climbed 24 percent while isopentane and natural gasoline rose 6 percent.

Production of liquefied gases, including ethylene, at refineries was up 13 percent in 1960.

Total production in 1960 of lpg's was 10,661,812,000 gallons. Ethane-ethylene output was 971,997,000 gallons. Stocks of lpg's at plants and terminals on December 31, 1960, was 917,621,000 gallons, up nearly 250 million gallons from inventory recorded on the same date in 1959. Stocks at refineries were recorded at 130,494,000 gallons, up some 26 million gallons.

Deliveries from plants and terminals for use in gasoline was 1,899,660,000 gallons. Other uses, including domestic, commercial, chemical, etc., accounted for 8,572,385,000 gallons. By-use breakdown is not available yet. In addition some 86,502,000 gallons of lpg's were imported.

Ethane-ethylene, propane, butane and butane-propane mixture statistics for 1960 in thousands of gallons follows:

Ethane-Ethylene

Production	971,977
Stocks on Dec. 31, 1960—	
Plants and terminals	2,719
Refineries	21,672
Total	24,391
Demand	926,241

Propane*

Production	5,939,166
Stocks on Dec. 31, 1960—	
Plants and terminals	646,883
Refineries	60,816
Total	707,699
Deliveries from plants and terminals for use in gasoline	54,264
Other uses	5,766,354
Total	5,820,816

*Includes propylene.

Butane*

Production	2,634,446
Stocks on Dec. 31, 1960—	
Plants and terminals	189,475
Refineries	56,070
Total	245,545
Deliveries from plants and terminals for use in gasoline	1,070,735
Other uses	1,500,108
Total	2,570,843

*Includes butylenes.

Butane-Propane Mixture

Production	720,881
Stocks on Dec. 31, 1960—	
Plants and terminals	33,442
Refineries	4,662
Total	38,104
Deliveries from plants and terminals for use in gasoline	23,268
Other uses	689,745
Total	712,613

Crude Oil Stocks Climb

Domestic and foreign crude petroleum stocks at the close of the week ended Feb. 25 were 898,000 bbls. higher than at the end of the preceding week.

Week ended Feb. 25—231,452,000 bbls.

Preceding week—230,554,000 bbls.

This increase comprises a decrease of 354,000 bbls. in stock of domestic crude and an increase of 1,252,000 bbls. of foreign crude.

(Source: Bureau of Mines)

Miscellaneous

Mineral Oils—Prices in this area of the market held steady and firm from January 1960 until March 1 when export prices for white mineral oils rose a minimum of five cents a gallon and export prices for petroleum were increased a minimum of one-half cent a pound.

Domestic prices were not changed but trade sources say it will not be long before an increase is also made in this area of the market.

No specific date is mentioned but rising costs including costs for raw oils, chemicals, filtering mediums and labor, which were cited for the increase in export prices, must also take a toll on the domestic market it would reasonably seem.

Wide application field for mineral oils continues to keep the market strong. Some end use areas may dip occasionally, producers report, but increases in other areas usually tend to buoy up the market.

Producers are eyeing Washington where the fight is being waged for temporary extension of clearances for white oils. Next target: Permanent FDA clearance.

Since most white oils are used only as indirect additives in processing equipment ment chances are good that permanent relief will ultimately be granted.

Only loss so far in the clearance fight has been oil use in confectionary application which producers consider a small segment of business at best.

IMPORTS at United States Ports

New York

AGAR—92 cs, T M Duche & Sons, Leixoes
ALUMINUM FLUORIDE—280 bgs, Atlantic Raw Materials, Genoa
ALUMINUM HYDROXIDE, GEL—10 cans, E M Sergeant Pulp & Chemical Co, Copenhagen
ALUMINUM SILICATE—60 bgs, Engelhard Industries, Bremen
ALUMINUM SULFATE—400 bgs, Industrial Chemical & Dye Co, Liverpool
500 bgs, Bremen
AMINOPYRINE—7 kgs, Copenhagen
AMMONIUM CARBONATE—85 dms, BASF Inc, Hamburg
100 dms, Rotterdam
AMMONIUM PERSULFATE—113 cks, Riches Nelson, Rotterdam
ANGELICA ROOT—80 bls, S B Penick & Co, Antwerp
ANILINE DYES—16 dms, Arondy Corp, Liverpool
20 dms, Dye Specialties Inc, Liverpool
15 dms, Carbic Hoechst Corp, Rotterdam
57 dms, H Bruckmann & Lorbacher, Bremen
17 dms, Sandoz Inc, Havre
8 dms, H Bruckmann & Lorbacher, Hamburg
335 dms, Rotterdam
ANIMAL CHARCOAL—200 bgs, Riches Nelson, Rotterdam
ANNATTO SEED—125 bgs, Foreign Domestic Distributors, Callao
520 bgs, Dorf International, Matarani
90 bgs, S American Minerals & Merchandise Corp, Cabedelo
600 bgs, Marshall Dairy Lab, Kingston
150 bgs, Salentine & Co, Kingston
150 bgs, Dorf International, Kingston
ANTIMONY—40 cks, Watson Geach, Liverpool
ANTIMONY REGULUS—40 cs, Indussa Corp, Antwerp
403 ingots, Antwerp
1,237 cs, Rijeka
ARABIC GUM—50 bgs, National City Bank, Port Sudan
500 bgs, Bank of N Y, Port Sudan
ARROWROOT—5,000 bgs, Morningstar Paisley Inc, St Vincent
ASCORBIC ACID—24 dms, Byron Chemical Co, Kobe
BARBASCO ROOT—142 bls, Astoria Panamericana, Callao
BEESWAX—20 bgs, Wm Diehl & Co, Parangua
63 bgs, Anglo American Hides Co, Parangua
167 bgs, Smith & Nichols, Parangua
100 bgs, International Commodities Corp, Itajai
504 bgs, S Zeitlins Sons, Parangua
25 bgs, Machado & Co, Puerto Plata
100 bgs, H H Pike & Co, Tampico
70 bgs, Kane Import Corp, Puerto Barrios
60 bgs, Kane Import Corp, Cristobal
135 blks, Djibouti
16 bls, Progreso
62 bgs, Parangua
BERGAMOT OIL—32 cs, Messina
BILE—5 dms, Alvarez Terner Corp, Vera Cruz
BILE ACIDS—22 dms, Merck & Co, Buenos Aires
BLEACHING POWDER—100 dms, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—10 dms, Hollander Trading Corp, Callao
BONE—684 bgs, Santos
BONEMEAL—24 dms, Harrison & Crossfield, Antwerp
BRONZE POWDER—100 dms, Hamburg
CADMIUM OXIDE—110 dms, Antwerp
CALCIUM CARBONATE—1,100 bgs, Whittaker Clark & Daniels, Liverpool
574 bgs, H J Baker & Bro, Liverpool
600 bgs, Pluess Staufer, Antwerp
881 bgs, Antwerp
CALCIUM PHOSPHATE, DIBASIC—400 bgs, Wessel Duval & Co, Antwerp
CAMPHOR POWDER—50 cs, Magnus Mabee & Reynard, Kobe
CANANGA OIL—7 dms, London
CANDELILLA WAX—188 bgs, Cornelius Wax Refining Corp, Tampico
621 bgs, Tampico
CARAWAY SEED—200 bgs, Levy & Levis Co, Rotterdam
300 bgs, P H Petry, Rotterdam
100 bls, Meer Corp, Rotterdam
100 bgs, Rotterdam
CARBAZOL—40 dms, F L Kraemer, Rotterdam
CARDAMOMS—10 cs, S B Penick & Co, Colombo
CARDAMON SEED—50 bgs, Wm E Martin & Sons, Puerto Barrios
CARNAUBA WAX—502 bgs, Smith & Nichols, Parnahyba
188 bgs, Baldini & Co, Parnahyba
76 bgs, Muislin Bros, Parnahyba
251 bgs, J W Hanson Co, Parnahyba
188 bgs, Balfour Guthrie, Parnahyba
313 bgs, M Argueso & Co, Parnahyba
38 bgs, Cornelius Wax Refining Corp, Parnahyba
112 bgs, Cornelius Wax Refining Corp, Natal
297 bgs, N American Cocoa Trading Co, Salvador
56 bgs, J H Schroder, Fortaleza
56 bgs, Balfour Guthrie, Fortaleza
327 bgs, S C Johnson & Son, Fortaleza
56 bgs, Smith & Nichols, Fortaleza
111 bgs, Strahl & Pitsch, Fortaleza
289 bgs, M Argueso & Co, Fortaleza
210 bgs, Cornelius Wax Refining Corp, Fortaleza
279 bgs, Frank B Ross, Fortaleza
44 bgs, J W Hanson Co, Fortaleza
56 bgs, Morgan Guaranty Trust Co, Fortaleza
78 bgs, Fortaleza
444 bgs, Salvador
CASEIN—1,600 bgs, E Lang, Buenos Aires
500 bgs, L N White & Co, Buenos Aires
1,000 bgs, Borden Chemical Co, Montevideo
645 bgs, F H Paul & Stein Bros, Oslo
160 bgs, First Spice Co, Rotterdam
1,617 bgs, Hamburg
CASSIA—100 bls, Chemical Bank, Saigon
375 bls, Van Norden & Co, Saigon
250 bls, A G Dunn, Saigon
250 bls, M J Golombeck, Saigon
2,967 bls, K H Landes & Co, Saigon
150 bls, Rotterdam
CASTOR OIL—200 tons, Archer Daniels Midland Co, Fortaleza
240 tons, George Degen & Co, Recife
100 tons, Brazilian Industrial Oils, Fortaleza
210 tons, Recife
CELERY SEED—427 bgs, Darrnhower & Co, Bombay
255 bgs, M J Golombeck, Bombay
CETYL ALCOHOL—112 bgs, Orbis Products Corp, Liverpool
CHESTNUT EXTRACT—2,600 bgs, Bordeaux
CHLORAL HYDRATE—20 kgs, Liverpool
CHLORINATED RUBBER—1,800 bgs, C M C Chemicals Inc, Liverpool
CINNAMON BARK—98 bgs, Kellys America Ltd, London
CINNAMON LEAF OIL—5 dms, Dodge & Olcott, Galle
CINNAMON QUILLS—50 bls, Hismoco American Co, Colombo
200 bls, V A Cordovi, Colombo
35 bls, Curacao Trading Co, Colombo
CITRONELLA OIL—40 dms, Lo Curto & Funk, Puerto Barrios
COBALT POWDER—25 cks, C Hardy, Havre
COCONUT OIL, 234 tons, Pacific Vegetable Oil Corp, Manila
812 tons, Bank of America, Cebu
CODLIVER MEAL—400 bgs, Dyson Shipping Co, Reykjavik
CODLIVER OIL—204 dms, Peder Devold Oil Co, Reykjavik
85 dms, Arista Oil Products Corp, Reykjavik
265 dms, Peder Devold Oil Co, Bergen
COMFREY ROOT—10 bgs, Herbarium Inc, Hamburg
COPAL GUM—70 bgs, O G Innes Corp, Manila
COPPER CYANIDE—200 dms, Chemical Manufacturing Co, Liverpool
CORIANDER SEED—116 bgs, K H Landes & Co, Rijeka
750 bgs, Buenos Aires
CORN STARCH—1,000 bgs, Geismar & Co, Bremen
548 bgs, Rotterdam
CUBE POWDER—886 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—309 bgs, Khorramshahr
CUPROUS OXIDE—100 bgs, Hudson Shipping Co, Oslo
CUTTLEFISH BONE—50 cs, Bordeaux
100 cs, Yokohama
DAMMAR GUM—42 bgs, Wm H Scheel, Singapore
100 cs, O G Innes Corp, Bangkok
DEGRAS—50 dms, Manufacturers Trust Co, Antwerp
DEXTRIN—500 bgs, Manufacturers Trust Co, Rotterdam
600 bgs, Morningstar Paisley Inc, Rotterdam
300 bgs, Rotterdam
DIACETYL—20 cs, Lo Curto & Funk, Hamburg
DILL SEED—86 bgs, Levy & Levis Co, Bombay
DYES, COALTAR—170 dms, H Bruckmann & Lorbacher, Hamburg
85 dms, Orlex Dyes & Chemical Corp, Hamburg
116 dms, Toms River Chemical Co, Rotterdam
EARTH COLORS—1,800 bgs, Naftone Inc, Rotterdam
35 dms, United Ultramarine & Chemical Co, Rotterdam
450 bgs, Reichard Coulston, Bremen
520 bgs, Rotterdam
ELEMI GUM—105 cs, S Winterbourne & Co, Manila
EUCALYPTUS OIL—15 dms, Magnus Mabee & Reynard, Kobe
FENNEL SEED—82 bgs, Levy & Levis Co, Bombay
88 bgs, Buenos Aires
FERRIC SULFATE—75 dms, Liverpool
FISHMEAL—286 bgs, Callao
FUEL OIL—75,704 bbls, Hess Inc, Bajo Grande
246,653 bbls, Hess Inc, Punta Cardon
99,248 bbls, Central Petroleum Corp, Punta Cardon
123,979 bbls, Asiatic Petroleum Corp, Punta Cardon
163,934 bbls, Signal Oil & Gas Co, Las Piedras
115,013 bbls, Metropolitan Petroleum Corp, Punta Cardon
126,397 bbls, Metropolitan Petroleum Corp, Curacao
94,812 bbls, Humble Oil Co, Las Piedras
101,000 bbls, Humble Oil Co, Aruba
242,758 bbls, Humble Oil Co, Caripito
FURFURAL—892 tons, E I duPont de Nemours & Co, La Romana
GALLS—1 dm, Wilson Lab, Callao
GELATIN—100 bbls, Riches Nelson, Antwerp
224 bgs, Manhattan Adhesives Corp, Antwerp
100 bgs, T M Duche & Sons, Antwerp
10 bls, Coignet Chemical Co, Antwerp
39 dms, H Bruckmann & Lorbacher, Rotterdam
300 bgs, First National Boston, Hamburg
80 dms, D H Burdett, Liverpool
300 bgs, King Shipping Co, Gothenburg
300 bgs, Marseille
134 bbls, Antwerp
111 bgs, Hamburg
250 cks, Havre
GINGER—56 bgs, Mincing Trading Corp, Kingston
50 bgs, K H Landes & Co, Kingston
GLUE—600 bgs, Jung Forwarding Co, Liverpool
GLYCERINE—500 tons, Lever Bros, Tandjong Priok
GRAPHITE—125 bgs, C Pettinos, Havre
250 bgs, C Pettinos, Colombo
250 bgs, Asbury Graphite Mills, Colombo
750 bgs, Joseph Dixon Crucible Co, Colombo
GYPSUM—180 dms, Hammill & Gillespie, Liverpool
GYPSUM, CRUDE—10,173 tons, U S Gypsum Co, Heatonport
HALIBUTLIVER OIL—1 dm, Arista Oil Products Corp, Yokohama
HEPTALDEHYDE—50 dms, Lo Curto & Funk, Rotterdam
HEPTANOIC ACID—586 dms, International Selling Corp, Marseille
HEXACHLOROETHANE—100 bgs, Henley & Co, Hamburg
HYDRAZINE HYDRATE—100 dms, E F Drew & Co, Bremen
IPECAC ROOT—10 bgs, J M Rodriguez, Cristobal
IRON BLUE—63 dms, Van Oppen & Co, Liverpool
IRON CARBONYL—108 dms, H Bruckmann & Lorbacher, Rotterdam
JALAP ROOT—26 bgs, Vera Cruz
JAPAN WAX—110 bgs, Mitsubishi Corp, Yokohama
KARAYA GUM—290 bgs, Colony Import & Export Corp, Bombay
123 bgs, Morningstar Paisley Inc, Bombay
360 bgs, Stein Hall & Co, Bombay
LACTOSE—6 dms, Gyma Lab, Rotterdam
LAUREL LEAF OIL—1 cs, Magnus Mabee & Reynard, Genoa
LAUREL LEAVES—138 bls, Izmir
LAVANDIN OIL—5 dms, Coutin Associates, Marseille
9 cks, Lo Curto & Funk, Cannes
LEAD CARBONATE, BASIC—220 bgs, Rotterdam
LEAD NITRATE—64 dms, Mohegan International, Antwerp
LEAD, RED—180 bgs, Rotterdam
LEAD, WHITE—20 bgs, Aceto Chemical Co, Liverpool
LEMON OIL—8 cs, Messina
LITHARGE—184 dms, Eagle Picher Co, Tampico
LOCUST BEAN GUM—200 bgs, Meer Corp, Genoa
300 bgs, P A Dunkel, Rotterdam
MAGNESIUM CARBONATE—20 cs, Antwerp
MAGNESIUM CHLORIDE—250 bgs, Interstate Universal Inc, Bremen
MANGROVE BARK—773 bgs, Chemical Bank, Dar es Salaam
MANGROVE EXTRACT—500 bgs, Saxe Cutch Corp, Singapore
MARJORAM—25 bgs, H H Pike & Co, Ciudad Trujillo
56 bgs, Marichal Kenes, Ciudad Trujillo
MASTIC GUM—5 cs, Piraeus
MELAMINE—6,613 bgs, Agrichem Corp, Yokohama
MENTHOL—100 cs, Kang Import Corp, Santos
50 cs, Norda Essential Oil & Chemical Co, Santos
10 cs, Magnus Mabee & Reynard, Keelung
50 cs, Lo Curto & Funk, Santos
120 cs, American Far Eastern Syndicate, Santos
11 dms, Biddle Sawyer Corp, Marseille
8 dms, Cannes
10 cs, Santos
MERCURIC OXIDE—40 bbls, Rijeka
MERCURY—40 flks, Lo Curto & Funk, Tampico
100 btls, Istanbul
100 flks, Leghorn
MESITYLENE—1 dm, Eastman Kodak Co, Rotterdam
5-METHYL-3-SULFANILAMIDE ISOXAZOLE — 40 dms, Hoffmann-La Roche Inc, Kobe
MINERAL LUBRICATING OIL—200 dms, Asiatic Petroleum Corp, Rotterdam
MINERAL WAX—280 bgs, Hamburg
MOLASSES—1,032 tons, Pacific Molasses Co, Salaverry
MONTAN WAX—5 bgs, Parker Trading Corp, Hamburg
MUSTARD SEED—220 bgs, C Gulden, London
500 bgs, P J Anderson & Sons, Copenhagen
300 bgs, P H Petry, Copenhagen
500 bgs, Old Dutch Mustard Co, Copenhagen
200 bgs, Kellys America Ltd, Copenhagen
600 bgs, Plochman & Harrison, Copenhagen
NAPHTHALENE—1,928 bgs, Rotterdam
650 bgs, Antwerp
NIGER SEED—117 bgs, Hinton & Co, Massawa
106 bgs, American Grain & Feed Corp, Massawa
3-NITRO-4-HYDROXYPHENYL ARSONIC ACID—15 cks, Havre
NUTMEG—107 bgs, P H Petry, Hamburg
NUTMEG OIL—5 dms, Lo Curto & Funk, Penang
OCOTEA CYMBARUM OIL—46 dms, Lo Curto & Funk, Rio de Janeiro
OITICICA OIL—125 tons, Bowring & Co, Fortaleza
OLIVE OIL—250 dms, National City Bank, Seville
49 dms, M de Rosa, Seville
250 dms, Manufacturers Trust Co, Seville
200 dms, Swiss Credit Bank, Seville
50 dms, Seville
OPIUM—18 cs, Hoffmann-La Roche Inc, Istanbul
OREGANO—221 bgs, Sokol & Co, Tampico
221 bgs, H Marmorek & Son, Tampico
OURICURY WAX—222 bgs, Cornelius Wax Refining Corp, Salvador
66 bgs, Marine Midland Trust Co, Salvador
66 bgs, Smith & Nichols, Salvador
124 bgs, Salvador
PALM OIL—317 tons, E F Drew & Co, Matadi
PALMKERNEL OIL—692 cs, B M T Commodity Corp, Rotterdam
PAPAIN—56 cs, Chas L Huisking & Co, Colombo
118 cs, V A Cordovi, Colombo
40 cs, Mombasa
PAPRIKA—800 bgs, M J Golombeck, Hamburg
150 bgs, Gel Spice Co, Hamburg
150 bgs, National City Bank, Hamburg
650 bgs, R T French, Hamburg
400 bgs, Meer Corp, Hamburg
PATCHOULI OIL—3 dms, J Beriage, Liverpool
28 cs, International Products Corp, Penang
PECTIN—180 dms, T M Duche & Sons, Copenhagen
PEPPER, BLACK—80 bgs, Delano Corp of America, Singapore
80 bgs, C M Van Sillevoldt, Singapore
140 bgs, Atlanta Textile Corp, Singapore
105 bgs, W L Willner, Singapore
140 bgs, Berns & Koppstein, Singapore
40 bgs, Max van Pels, Singapore
PEPPER, RED—224 bgs, Kobe
PEPPER, WHITE—100 bgs, Mincing Trading Corp, Belem
60 bgs, K H Landes & Co, Singapore
80 bgs, Ludwig Mueller, Singapore
70 bgs, C M Van Sillevoldt, Singapore
70 bgs, A G Dunn, Singapore
70 bgs, Atlanta Textile Corp, Singapore
PETROLEUM, CRUDE—114,956 bbls, Ashland Oil & Refining Co, La Salina
88,822 bbls, Humble Oil Co, Las Piedras
200,000 bbls, Mobil Oil Co, Puerto La Cruz
36,792 tons, California Oil Co, Maracaibo
192,001 bbls, Sohio Petroleum Co, Maracaibo
232,429 bbls, California Oil Co, Sidon
123,283 bbls, Cities Service Oil Co, Las Piedras
PHENOBARBITAL—60 dms, Copenhagen
PHENYL TRIMETHYLAMMONIUM CHLORIDE—10 dms, Hoffmann-La Roche Inc, Hamburg
PHLOROGLUCINOL—16 dms, J E Bernard, Rotterdam
g-PICOLINE—5 dms, Antwerp
PIMENTO LEAF OIL—2 dms, Fritzsche Bros, Kingston
2 dms, George Lueders & Co, Kingston
4 dms, Norda Essential Oil & Chemical Co, Kingston
POLYVINYL ACETATE EMULSION—30 dms, Lloyd Associates, Bremen
POPPYSEED—300 bgs, Almond Products Co, Gdynia
100 bgs, Globe Products Co, Gdynia
300 bgs, Louis Furth, Rotterdam
POTASSIUM FERROCYANIDE—300 bgs, Filo Color & Chemical Corp, Rotterdam
POTASSIUM METABISULFITE — 200 dms, H Reifenberg, Rotterdam
POTASSIUM PERCHLORATE—100 dms, Ugine Industries, Havre
100 dms, Orlex Dyes & Chemical Corp, Gothenburg
PYRETHRUM EXTRACT—25 dms, Bemo Shipping Co, Mombasa
40 dms, Mombasa
PYRITES—376 cks, American Metal Climax, Leixoes
QUEBRACHO EXTRACT—2,749 bgs, Barkey Importing Co, Buenos Aires
301 bgs, International Products Corp, Buenos Aires
QUINIDINE SULFATE—9 cs, Chas L Huisking & Co, Hamburg
d-RIBONOLACTONE—10 dms, Hoffmann-La Roche Inc, Hamburg
RICE STARCH—534 bgs, American Key Products, Rotterdam
ROSE HIPS—17 bgs, Hamburg
SABADILLA SEED—144 bgs, F D Keller & Son, La Guaira
SAGE LEAVES—100 bls, Rijeka
SAGO FLOUR—168 bgs, Manhattan Adhesives Corp, Singapore
R-SALT—52 bbls, W A Erickson, Rotterdam
SEEDLAC—250 bgs, Wah Chang Corp, Bangkok
250 bgs, Capitol Shellac Corp, Bangkok
SESAME OIL—50 dms, Aarhus
SESAME SEED—2,000 bgs, Independent Halvah & Candies, Puerto Barrios
SHELLAC—290 bgs, National City Bank, Hamburg
44 bgs, F H Paul & Stein Bros, Hamburg
SOAP BARK—250 bls, S B Penick & Co, Talcahuano
SODA, CAUSTIC—234 dms, B T Chemco Inc, Gothenburg
SODIUM CYANIDE—250 dms, American Cyanamid Co, Liverpool
100 dms, Ugine Industries, Havre
SODIUM PERBORATE—200 bgs, United Merchants & Manufacturers, Leghorn
1,500 bgs, Chemical Manufacturing Co, Liverpool
SODIUM PHOSPHATE—410 cs, Milwaukee Spice Mills, Rotterdam
SODIUM SILICOFLUORIDE—272 bgs, Barcelona
STARCH—1,233 bgs, Morningstar Paisley Inc, Rotterdam
STRYAX—24 cs, Beirut
STRYCHNINE—2 cs, Prentis Drug & Chemical Co, Liverpool
SULFAMIC ACID—550 bgs, Bordeaux
SULFUR, CRUDE—10,000 tons, Dixon Chemical Co, Coatzacoalcos
3,149 tons, Armour Agricultural Chemical Co, Coatzacoalcos
TAPIOCA—1,102 bgs, Stein Hall & Co, Itajai
880 bgs, Morningstar Paisley Inc, Itajai
600 bgs, Bernco International, Itajai
450 bgs, Manhattan Adhesives Corp, Itajai
TAPIOCA FLOUR—441 bgs, First National Boston, Kohsichang
560 bgs, Geismar & Co, Kohsichang
224 bgs, Stein Hall & Co, Kohsichang
1,120 bgs, Balfour Guthrie, Penang
TALC—5,310 bgs, Charles Mathieu, Genoa
TARTARIC ACID—200 bbls, Ceribelli & Co, Genoa
TEA OF MATTE—80 cs, Meer Corp, Parangua
TERPIN HYDRATE—77 cks, Bordeaux
THALLIUM SULFATE—2 cs, Frank Samuel & Co, Bremen
THEOBROMINE—7 dms, R W Greef & Co, Rotterdam
10 dms, George Uhe Co, Rotterdam
TRAGACANTH GUM—37 cs, Meer Corp, Khorramshahr
201 cs, Am-Iran Corp, Khorramshahr
13 bgs, Khorramshahr
TRICHLOROETHYLENE—100 dms, Chemical Manufacturing Co, Liverpool
UREA—300 bgs, Nylos Trading Co, Genoa
VALERIAN ROOT—180 bgs, S B Penick & Co, Bombay
VEGETABLE OIL FATTY ACID—216 bgs, Wallace & Tiernan, Santos
VETIVER OIL—2 dms, Port Au Prince
WATTLE EXTRACT—534 bgs, Elkan River Plate Corp, Mombasa
533 bgs, Barkey Importing Co, Durban
WAX—235 bgs, Hostawax Co, Bremen
YOHIMBE BARK—82 bgs, S B Penick & Co, Marseille
ZIRCONIUM SILICATE—5 bgs, C Tennant Sons & Co, Santos

Los Angeles

CELERY SEED—87 bgs, California Commodities Corp, Bombay
CINNAMON QUILLS—15 bls, W R Grace & Co, Colombo
COPPERAS—499 bgs, Mattoon & Co, Kobe
COPRA—500 tons, Romblon
1,000 tons, Boac
500 tons, Quinabigan
250 tons, Castanas
FUEL OIL—113,641 bbls, Standard Oil Co, Aruba
220,427 bbls, Esso Export Corp, Las Piedras
209,181 bbls, Texaco Co, Point a Pierre
PEPPER, BLACK—160 bgs, C M Van Sillevoldt, Alleppey
35 bgs, Singapore
TAPIOCA FLOUR—250 bgs, H M Newhall & Co, Bangkok
12,927 bgs, Kohsichang

Philadelphia

ANTIMONY OXIDE—469 bgs, National Lead Co, Liverpool
80 cks, N Trotter Co, Liverpool
ASBESTOS FIBER—100 bgs, N American Asbestos Corp, Capetown
1,340 bgs, Chas Kurz & Co, Lourenco Marques
BONE—902 bgs, Phila National Bank, Calcutta
894 bgs, Velleman Co, Buenos Aires
CALCIUM CARBONATE—1,600 bgs, Whittaker Clark & Daniels, Liverpool
CALCIUM PHOSPHATE, DIBASIC—1,005 bgs, Wessel Duval & Co, Antwerp
CAMPHOR POWDER—90 cs, Keelung
CASTOR OIL—100 tons, Fortaleza
FUEL OIL—173,430 bbls, Humble Oil Co, Aruba
132,236 bbls, Texaco Co, Puerto La Cruz
GLYCERINE—225 dms, Colombo
MAGNESIUM OXIDE—320 cs, Darlington Chemical Co, Liverpool
MENTHOL—75 cs, Wah Chang Corp, Keelung
PETROLEUM, CRUDE—179,778 bbls, Gulf Oil Corp, Bachaquero
261,362 bbls, Gulf Oil Corp, La Estacada
286,683 bbls, Mobil Oil Co, Mina Al Ahmadi
188,148 bbls, Texaco Co, Sidon
136,367 bbls, Atlantic Refining Co, Pamatacual
QUEBRACHO EXTRACT—1,089 bgs, Tanimex Corp, Buenos Aires
378 bgs, Tac Tannins & Chemicals Inc, Buenos Aires
SODIUM BICARBONATE—997 bgs, Chemical Manufacturing Co, Liverpool
TAPIOCA FLOUR—1,680 bgs, Stein Hall & Co, Kohsichang
TRICHLOROETHYLENE—50 dms, Chemical Manufacturing Co, Liverpool
VANILLA BEANS—69 cs, Djibouti

San Francisco

BONEMEAL—631 tons, Stauffer Chemical Corp, Buenos Aires
CARAWAY SEED—150 bgs, McClintock Stern Co, Rotterdam
CARDAMOM SEED—10 cs, Wheeler & Miller, San Jose
CASEIN—400 bgs, J H Spellacy, Sydney
100 bgs, Borden Co, Buenos Aires
200 bgs, First Spice Co, Amsterdam
1,599 bgs, Western Dairy Products, Auckland
CELERY SEED—87 bgs, H M Newhall & Co, Bombay
87 bgs, California Commodities Corp, Bombay
CELLULOSE EXTRACT—400 bgs, H J Boutin & Son, Gothenburg
COPRA—1,500 tons, Cargill Inc, Ozamis
1,000 tons, Cargill Inc, Cebu
500 tons, Bank of California, Guiguis
500 tons, Bank of California, Cebu
2,000 tons, Ozamis
842 tons, Guiguis
500 tons, Romblon
500 tons, Boag
1,000 tons, Castanas
500 tons, Quinabigan
1,600 tons, Cebu
CORTISONE ACETATE—18 cs, Genaco International Co, Pusan
DEXTRIN—235 bgs, Morgan Guaranty Trust Co, Amsterdam
200 bgs, Morningstar Paisley Inc, Amsterdam
400 bgs, Arabol Manufacturing Co, Amsterdam
GRAPHITE—500 bgs, Pacific Graphite Co, Hong Kong
PAPRIKA—100 bgs, W L McClintock Co, Marseille
100 bgs, McClintock Stern Co, Hamburg
250 bgs, W C Auger & Co, Hamburg
PEPPER, BLACK—80 bgs, California Commodities Corp, Cochin
80 bgs, Ludwig Mueller, Alleppey
1,600 bgs, Alleppey
80 bgs, Cochin
70 bgs, Singapore
PEPPER, RED—30 bgs, Hismoco American Co, Kobe
PERCHLOROETHYLENE—100 dms, International Selling Corp, Marseille
SAGE LEAVES—100 bls, H M Newhall & Co, Hamburg
TANKAGE—524 bgs, Tupman Thurlow, Buenos Aires
TAPIOCA FLOUR—2,840 bgs, H M Newhall & Co, Kohsichang
UREA—10,000 bgs, Atkins Kroll & Co, Amsterdam
VANILLA BEANS—19 cs, Williams Dimond & Co, Papeete
m-XYLYLENDIAMIN—7 dms, California Research Corp, Amsterdam

Coatings Materials

Coatings materials markets slipped into a quiet groove for the week as demand for the pigments, resins and lacquer materials held at routine levels. The general attitude is best summed up in the words of one producer as keeping his fingers crossed since, while demand may not be at its highest levels it could get worse. Nearly all the producers contacted were looking forward to the spring months and the usual speed-up in market activity that usually comes with the warmer months.

Current listings will probably hold for most contracted coatings materials through the next quarter. In the case of the phthalate esters, trade sources do not anticipate any increases on the esters at this time. However, it is noted that there is still time for a price change to be slipped in under the deadline.

Spot markets were reported to be stable. Shellac listings seem unlikely at this time to be involved in any price changes. Demand is reported to be slightly improved, with greater improvement expected in the next few months.

The Bureau of Census has announced a change in reporting the monthly sales of paints, lacquer and varnish. According to the announcement from the Bureau, reports of sales will be changed to reflect more closely their actual value. In addition, a breakdown on trade and lacquer sales is also promised. The new system is be used with the January report which is now in the process of being sent out.

Lower listings for industrial grade urea are now in effect, according to the announcement by one leading nitrogen products producer. The lower listings for the industrial grade follows the recent decreases on the agricultural grades. Latest prices for the industrial grade are: $100 per ton for carlot bagged shipments and $96 for bulk quantities. Both are on an f.o.b. basis.

A major synthetic resin producer has announced the development of a new synthetic resin. The company reports that the resin has a wide range of compatibilities while possessing a high softening point. In addition it is hard and friable at room temperature. The unusual characteristics are felt to suggest immediate applications in flexographic and glycol-soluble inks, overprint lacquers, polymer-type emulsions and in a wide range of similar applications.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
104.55	104.55	104.56	103.03

For Current Prices see Page 10

Prime Pigments

Aluminum Paste and Powder — While some improvement is noted in the demand for aluminum products, the demand for aluminum pigments continues on at about the same pace established in the past few weeks. Listings for both the past and powder are reported to be unchanged. Supplies, of course, remain adequate.

Carbon Black — Production of carbon black in January was 8.5 percent below January of last year, reports the Bureau of Mines. Shipments were off a whopping 17.1 percent from the same month last year while stocks were up a corresponding 7 million pounds.

Output for January was placed by the Bureau at 164,261,000 pounds of which 140,205,000 pounds were reported as channel and 24,056,000 pounds as furnace black. Production in December was reported at 163,560,000 pounds and hit 179,568,000 pounds in January.

Shipments of carbon black at 157,059,000 pounds was more than 11 million pounds under the level set in the previous month and almost 32 million pounds under January, 1960. Shipments that month were reported by the Bureau at 189,430,000 pounds. With the decrease in shipments in January, stocks jumped 7 million pounds to 278,236,000 pounds at the end of the month. Last year for the same month, stocks were reported at 183,980,000 pounds.

Exports of carbon black continue to be of special interest to producers as new carbon black plants went on stream overseas in the last year. The effect on domestic producers was expected to be adverse but according to the latest report from the Bureau of Mines, 1960 was a good year for exports of carbon black.

The Bureau reports that for 1960 exports of carbon black topped 543 million pounds. This compares to the 513 million pounds reported for 1959. In December, exports were estimated at 44,782,000 pounds while January of 1960 saw 60,908,000 pounds exported.

While the figures for last year's exports are encouraging to producers, they will want to see what trends develop in the next six months before making any long-term forecast. Listings for all grades of carbon black are reported to be unchanged in the past few weeks.

Cobalt Oxide — Suppliers are keeping their fingers crossed as the market for cobalt oxide continues to jog along. No difficulties have been experienced in getting cobalt into this country and demand for the oxide here is considered to be about normal. Prices are holding in the same range set over a year ago.

Lead Pigments—Over-all market conditions are described as routine as the market for the pigments continued to hold in its old groove. Supplies of the lead pigments are more than ample for present needs, while listings are reported to be unchanged from the levels established at the beginning of the year.

Zinc Oxide—With listings for zinc oxide and zinc dust at their recently reduced levels, the market for the oxides is reported to be at less than normal levels. Supplies of the oxide are still plentiful with producers making cutbacks in production in an attempt to lessen the glut of stocks.

Synthetic Resins

The following figures show production in pounds for December and list November's figures for comparison, as reported by the Tariff Commission:

Production

	November*	December**
Phenolic and other tar acid resins:		
Molding resins	15,435,240	15,035,342
Laminating resins	5,337,054	5,602,411
Protective coating resins, modified, unmodified, except by rosin	2,077,751	1,673,390
Urea and melamine resins:		
Protective coating resins, straight modified	2,935,116	2,505,774
Styrene resins:		
Protective coating resins, straigh modified	6,327,834	5,776,742
Vinyl resins:		
Total all types	98,006,942	86,708,787
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	17,847,939	17,404,381
Modified with tar acids, rosin and/or other material except styrene	5,649,994	5,365,562
Polybasic acid types except phthalic:		
Unmodified	654,986	547,937
Modified with tar acids, rosin and/or other material except styrene	619,260	512,176
Rosin modification for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	820,005	767,430
Esterified with other alcohols, pentaerythritol, glycols, etc.	527,689	475,174
Modifications with phenolic and other tar acid resins	1,703,794	1,624,060
Modifications with maleic and fumaric acids	2,045,983	2,231,307
All other modifications	3,618,687	3,454,492
Coumarone-indene and petroleum polymer resins	17,916,411	16,515,852
Miscellaneous plastics and resin materials	25,622,333	24,303,396

* Revised. ** Partly estimated.

Lacquer Materials

Plasticizers—With the on-stream status of one petroleum-naphthalene an established fact, producers of the phthalate esters are looking forward to an improved supply position for the esters. Greater support from the steel mills is expected to support the general improvement in the availability of supplies.

Demand at the present time is reported to be keeping in step with the overall supply position. However, in the topsy-tervy ester situation this marks a decrease

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Coatings Materials

in demand rather than an increase, since in the past year, the trend for the ester was for a sharp imbalance in the supply/demand equation, usually weighted toward the demand side rather than the supply end.

As to price trends, trade sources report that the listings for the phthalate esters will probably hold through the next quarter. With phthalate anhydride listings currently at its January 1 position, indications are that prices will remain there. April 1 prices are usually announced before the end of the second week of March, so while there is still time for a price change to slip in before the deadline, sources do not feel that it is likely.

Miscellaneous

Animal Glue—The Census Bureau reports that total production of animal glue in January was 8.999 million pounds of which 4.740 million pounds was reported as hide glue and 4.259 million pounds as bone glue. The output for the previous month at 8.767 million pounds was slightly lower, but for January, 1960 production broke the 9 million-mark at 9.231 million pounds.

Shipments of hide glue took most of January's production at 4.320 million pounds, while bone glue picked the remaining 4.582 million pounds. Total shipments was placed at 8.9 million pounds as against 7.657 million pounds during the previous month and 10.305 million pounds shipped in January, 1960.

Stocks of hide and bone glue totaled 37,444 million pounds at the end of January or slightly above the level reported at the beginning of the month. For the same month last year, stocks were placed by the Census Bureau at 31.266 million pounds.

Naval Stores

USDA reports that for the week ending March 3, the overall sales of commercial gum totaled 950 drum equivalents as against 1,638 during the previous week. Drum sales f.o.b. plants were reported at $15.75 for WG and M and below at a range of $13.50 to $14.50 but mostly at the narrower range of $13.50 to $14.00. Tank car sales were at $13.80 for M and below, with bags in the same grade at $14.00.

Overall sales of turpentine was placed at 128,720 gallons of export and domestic shipments.

French Paint Maker Acquired

Rinshed-Mason, SA, Lausanne, Switzerland, has purchased a controlling interest in Etablissements Weeks, SA, French paint manufacturer with headquarters in Paris. Rinshed-Mason, SA is a wholly-owned subsidiary of the Rinshed-Mason Company, Detroit, Mich.

Sodium: Easier Prospecting

—Continued from page 4

Karl S. Landstrom says that in the department's opinion adoption of the rental would not work a hardship on any sodium prospectors.

Director Landstrom explained that prospecting permits for sodium are issued by BLM to allow operators to explore and test areas for possible commercial development. The new rules would require sodium prospectors to furnish a bond of at least $1,000. If a prospector finds a commercial deposit he may then receive a sodium lease. The developer under a permit would pay a 25-cents-an-acre rental plus a 12½ percent royalty on actual production. Sodium deposits are also leased by competitive bidding.

Under the proposed rules no person, association, or corporation may hold more than 5,120 acres at any one time in any one state except in cases where it can be proven that additional lands (up to a total of 15,360 acres) are necessary for braced in a permit are again available for application. Under the new rules, lands would be available for filing new applications as soon as a canceled or relinquished permit is noted on BLM's rec- the original 5,120 acres to be mined economically.

The proposed rules also clarify a technical point about when lands formerly emords except that if before notation on the records the permit would have expired, the lands are available for new applications immediately (without notation).

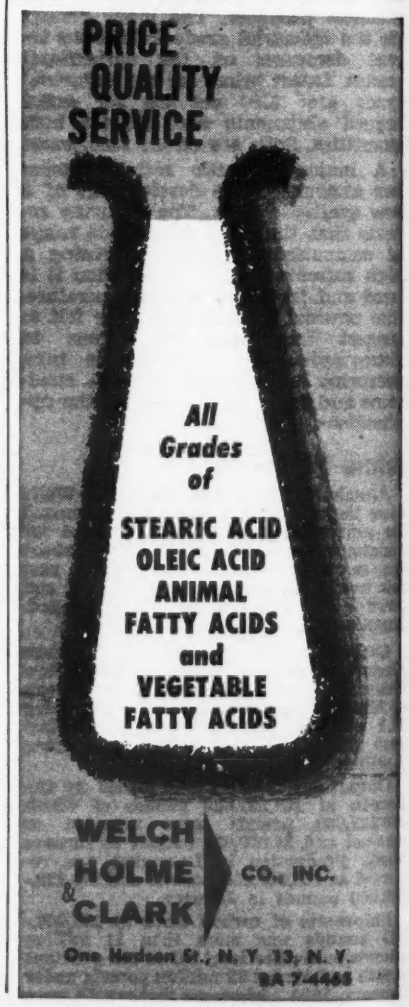
United Carbon Names Two

United Carbon Company, New York, has made two international sales appointments. Michael Neumand has been named sales manager of the company's new French subsidiary, United Carbon France, SA, and H. L. Kirchschlager has been appointed product manager for sales to South America and Mexico.

Bids Wanted

Drugs, Tetracycline Hydrochloride, capsules, USP, 250 mg., 100s, 3,448 bots., Bid IFB N7023-M5-5-61, Mar. 24. **Phenobarbital Tablets,** USP, 0.15 gm., 1¼ gr., 1000s, 2,400 bots. **Phenolsulfonphthalein Injection,** 0.006 gm., 1/10 gr., 1cc., 10s, USP, 912 bxs., **Prednisone Tablets,** USP, 5 mg., 1000s, 1,566 bots., **Prednisone Tablets,** USP, 5m g., 1000s, 168 bots., **Quinidine Sulfate Tablets,** 0.2 gm., (3 gr.) 500s, USP, 1,200 bots., **Saccharin Sodium Tablets,** USP, 15 mg., ¼ gr., 1000s, 8,640 bots., **Secobarbital Sodium Capsules,** USP, 0.1 gm., 1½ gr., 500s, 1,632 bots., Bid IFB M5-95-61, Mar. 28. **Cresol Solution,** saponated, NF, 5 gal., 150 drums. **Glycerine,** USP, 10 lb. cn., 1,704 cns., **Hexachlorophene,** no amounts or specifications given. Bid IFB M5-96-61, Mar. 28. Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N. J.

Lime, quick, estimated quantity 1,000 tons, Bid IFB 25-600-61-94B, Mar. 20. Base Procurement Office, Offutt Air Force Base, Nebr.



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Oils, Fats and Waxes

Edible vegetable oils continued under the influence of soybean futures. Market was irregular, fluctuating with beans. Soybean and cottonseed oils closed steady, while peanut and corn advanced ¼ to ⅜ cent. Corn oil was scarce and sales taking place at the highest level since April, 1956. Consuming demand continued restricted to actual needs. Crude coconut oil was irregular but closed steadier. Olive oil for shipment was up $1 and $2 per 100 kilos owing to increased demand for Spanish oil from Italy and Greece.

Scarcity of offers of tallow and greases because sold up production caused the market to remain in a strong position. Trading was restricted, chiefly for small buyers account. Top grades of tallow were slightly easier with sales at ⅛ cent lower while greases were unchanged.

In the industrial group, trading was still confined to actual needs while a moderate improvement was noted in the movement against existing contracts. Tung oil was off ½ cent per pound due mainly to lower sales of government owned oil. Stocks of this oil are tight and offerings were still light. Refined fish oils were firmer and advanced 3/10 cent per pound. Improved buying interest for crude menhaden oil resulted in a firm market at prevailing quotations.

Improved consuming demand for oiticica oil stiffened this market. Trading took place at an advance of ¼ cent per pound, with sellers generally naming ½ cent higher.

Slow demand for soybean meal caused market to decline $2 per ton. Extracted linseed meal was also inactive and dropped $1 per ton. Cottonseed and peanut meals were also easier, off $1 per ton.

Price Trends

Advanced

Corn oil, crude, 3/32c. per lb.
Refd., 3/32c. per lb.
Fish oils, refd., 3/10c. per lb.
Linseed meal, old process, $1 per ton.
Oiticica oil, ½c. per lb.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Reduced

Cocoa butter, 1½c. per lb.
Copra, $2.50 per ton.
Cottonseed meal, $1 per ton.
Linseed meal extract, $1 per ton.
Peanut meal, $1 per ton.
Soybean meal, $2 per ton.
Tallow, inedible, top grade, 1/32c. per lb.
Tung oil, ½c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1960
109.83	110.09	106.49	113.59

For Current Prices See Page 11

Vegetable Oils

Castor—Deliveries against contracts were in better request. Trading continues restricted to actual needs. No. 1 Brazilian was quoted nominally at 17½c. per pound, tankcars, New York, prompt delivery. Domestic grades were quiet and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	1,700,000
Previous week	.....	1,000,000
Corresponding week, 1960	.....	.....
Total this year	.....	15,894,000
Corresponding period, 1960	903,450	18,246,000

Coconut—Market closed steadier. Crude was maintained at 11¾c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment. The New York market was steady at 13¼c., tankcars, New York basis.

Corn—Crude was stronger, with sales at 17c. per pound, tankcars, f.o.b. mills, prompt shipment, the highest price since April 1956. Refined oil was boosted to 20.72c., tankcars, New York basis.

Cottonseed — Futures were irregular closing easier and fractionally lower last week. Market reflected fluctuations of soybeans futures. Trading was active chiefly professional. Nearby delivery was steadier than deferred positions. Moderate hedging was noted May to July by trade interests. Cash oils was quiet. Refined salad oil was quoted at 16⅜c. per pound, tankcars, New York for prompt delivery.

Crude oil gains were not sustained, the market closing unchanged and steady. Offers continued light. Tankcars were quoted at 12¾c. per pound, f.o.b. Valley and Waco and nominal at 12⅞c. to 13c. in the southeast.

Olive—Improved demand from European buyers strengthened replacements from Spain and Tunisia. Prices for Spanish oil were higher at $53.50 to $55 per 100 kilos, drums, f.o.b. ports, March-April shipment as to seller. Offers from Tunisia were scarce and firmer at $55.50 to $56 per 100 kilos, drums, c.a.f. New York. Demand on spot was limited to actual needs. Prices ranged from $2.35 to $2.40 per gallon, drums, exwarehouse, according to quantity.

Peanut — Crude was firmer and sold at 14c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was quoted at 17¼c. per pound, tankcars, New York basis.

Rapeseed—Stocks were firmly held at the recent advance of ¾c. Tankcars were maintained at 16¼c. per pound, New York, March delivery. Drums ranged from 18c. to 18½c., spot, as to quantity.

Soybean—Market fluctuated with beans and closed unchanged and steady. Crude was quoted at 12⅞c. per pound, tankcars, Decatur, unrestricted for prompt shipment. Refined salad was named at 15¼c., tankcars, New York, prompt delivery.

Spain will not import soybean oil while offers are named well above normal prices, according to an announcement by the Ministry of Commerce. Recent reports stated that Spain had purchased 50,000 tons of soybean oil. The ministry stated Spain's import requirements of seed oils are estimated at 50,000 tons to fill the gap until the next olive oil crop becomes available. Soybean and other oil stocks owned by the government were adequate to supply the home market without further imports, the Ministry added. The announcement followed the third successive cancellation of tenders for the import of soybean oil.

Tung—Sales of government-owned oil at lower prices eased this market. Light sales took place at 28½c. per pound, tankcars, New York, prompt delivery. However, offerings continued light because of limited supplies. Drums ranged from 30c. to 30½c. per pound, drums, depending upon quantity.

CCC sold 2 tankcars of tung oil at 27½c. and 27¾c. per pound, f.o.b. Marrero, La., for unrestricted use last week compared with sales at 27.51c. to 28c., the week previous. Bids were received for 390,000 pounds.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, March 10, follow:

	Sales	High	Low	Close
		Cents per Pound		
March	167	14.94	14.45	14.69S
May	1,078	15.13	14.48	14.65S
July	1,093	15.23	14.56	14.74S
Sept.	138	14.77	14.15	14.33S
Oct.	80	14.10	13.45	13.66S
Dec.	45	13.90	13.30	13.50@13.54

Total sales and switches, 2,601 contracts.

Miscellaneous

Cocoa Butter — Price trend continued downward, market declining 1½c. to 52c. to 57c. per pound, spot, according to quantity. Demand was limited.

Copra—Shipments were quiet and easy. Prompt shipment was quoted at $155 per ton, c.i.f. Pacific coast for prompt.

Flaxseed—See-sawing prices in cash flaxseed market again brought out substantial trading on to-arrive basis. Largest volume was accomplished ahead of 2c. decline after prices had again advanced to the season's high of $3.08. Bids were at $3.05 a bushel, spot and to-arrive, basis Minneapolis. Futures market strengthened because of new export quota in Argentina. Under the new arrangement one ton of

Reports from the Argentine stated that the price support for the 1961-62 flaxseed crop would be increased to 690 pesos per 100 kilos from 600 pesos, last season.

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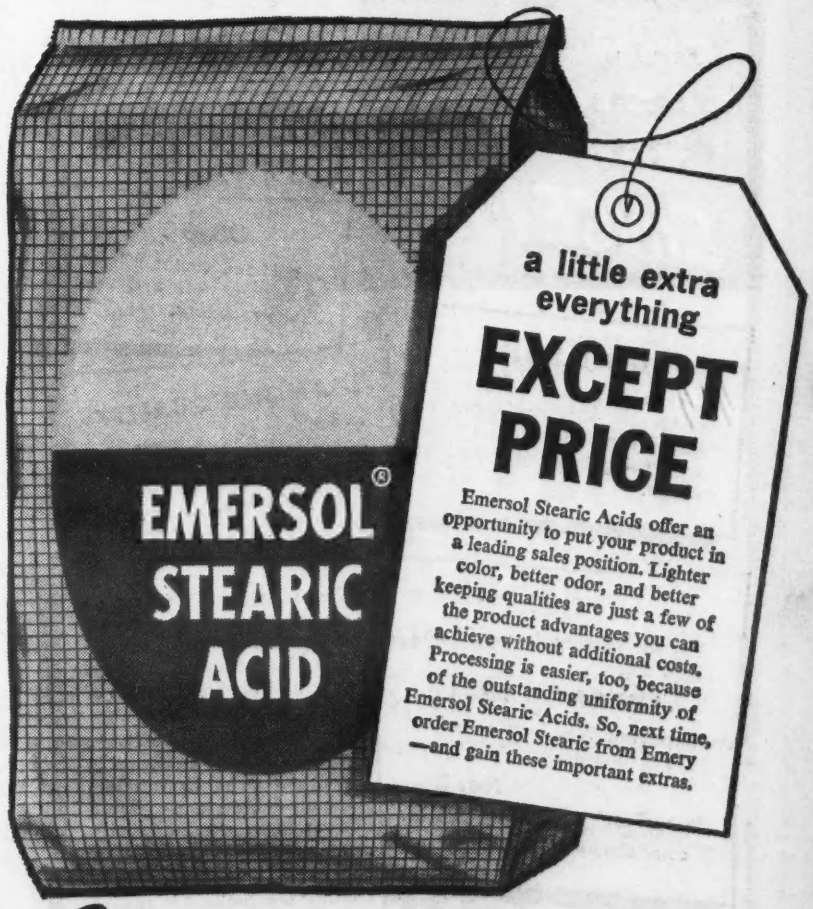
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Oils, Fats and Waxes

flaxseed can be exported for each five tons of oil, compared with previous quota of one for one.

Fats and Greases

Greases—Steady tone prevailed in this market. Trading was reported light, but offerings were scarce and maintained at unchanged levels. Choice white grease ranged from 9½c. to 9¾c. per pound, tankcars, delivered, as to seller and yellow, 6⅝c., same basis.

Lard—Market was irregular and unchanged. Cash lard was quoted at 13.40c. per pound, drums, Chicago.

Tallow—Offers continued scanty because of sold up production. Buying interest was light and restricted to actual needs. Top grades were off ⅛c. per lb. Bleachable fancy was held at 7⅛c. per pound, tankcars, delivered, as to seller; prime, 6¾c. to 6⅞c.; guaranteed fancy, 7½c. sales; special, 6¾c. No. 1 was higher at 6⅝c., same basis. Guaranteed fancy, 7⅞c. to 8c., bulk f.o.b. steamer and 8⅞c., drums, f.a.s.

Fish Oils

Cod—Trading was spotty. Market remained steady for prompt shipment at 7c. to 7⅛c. per pound, bulk, Gloucester, Mass. Offers for shipment were not liberal and closely held. Stocks on spot were unchanged ranging from 8⅜c. to 8½c. per pound, depending upon quantity.

Menhaden—Steady tone prevailed in the market. Buying interest was more active, though trading continued spotty. Crude menhaden was maintained at 6½c. per pound, tankcars, f.o.b. works. Refined fish oils were firmer and raised 3/10c. per pound. Light pressed was advanced to 10.3c. per pound, tankcars New York basis and drums ranged from 11.80c. to 12.30c. per pound, as to quantity.

Cake and Meal

Cottonseed Meal—Market was easier and $1 lower. Trading was spotty, chiefly in small lots. Meal, 41 percent, was quoted at $56 to $57 per ton, sacked, Mississippi Valley and $58 to $61, Alabama, Georgia, Carolina area.

Linseed Meal—Demand was only fair in this market and prices eased under pressure of re-sale offerings. Most quotations were $1 lower. Moderate improvement was noted in shipping directions against existing balances. Extracted meal, 34 percent protein, quoted $56 a ton, bulk, in carlots, f.o.b., Minneapolis. Old process expeller meal was $1 higher at $62.50, March-July.

Peanut Meal—Production was light. Demand was slow and quotations were lower. Old process meal 45 percent was quoted at $57.50 per ton, sacked, and solvent, $55, Georgia-Alabama area.

Soybean Meal—Softness persisted in this market. Meal for unrestricted billing declined $1.50 and $2 in the Midwest, track supplies pressing in some areas. Production was at about 75 percent of capacity, but still more than ample to meet demand. Meal, 44 percent, was quoted at $63 a ton, unrestricted, bulk, Decatur, for prompt delivery.

Waxes, Vegetables

There was little snap to trading in vegetable waxes last week. Consumers continued to limit purchases to immediate requirements. The market remained steady despite light demand. Carnauba was unchanged and steady because of the firmness of the Brazilian market. No. 3 Ceara crude was quoted at 64c. to 65c. per pound, spot, depending upon quantity and Parnahyba was 2c. higher. Yellows were also maintained at unchanged prices.

Candelilla was quiet and firm. Crude and refined beeswax continued steady at former quotations. Japan and ouricury were also held at former levels.

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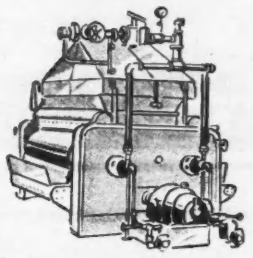

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Stainless Reactor, 2000 gal. Fully Jktd. Agitated.

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1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
1—Bird 36" x 50" solid bowl continuous, 347 SS.
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3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
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1—150 gal. 304 S.S. jacketed agitated Reactor.
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9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
1—Stokes Model 38-A Tray Dryer with 16—36" x 36" SS shelves.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 6' wide Apron Conveyor Dryer 48' long.

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1—Abbe 110 gal. 304 SS Jacketed Agitated Vacuum Dispersal Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—2' dia. Simpson Intensive Mixer, 304 SS.
1—45" dia. Lancaster Mixer, 7-1/2 HP motor.
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.

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3—Kinney Vacuum Pumps, 750 cfm, 1 micron, 15 HP.
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1—Niagara #510-28 T316SS pressure filter.
1—OLIVER 5'3" x 8' PRECOAT ROT. VACUUM FILTER—UNUSED.
2—Oliver 5'3" precoat T316 SS rot. vacuum filters.
10—DAVENPORT DEWATERING PRESSES; #1A, 2A, 3A.
25—SHARPLES #AS-16V SUPER CENTRIFUGALS, INCONEL, SLUDGE DISCH. FRAME.
3—Sharples #C-20, C-27 Super-D-Hydrators, T316SS.
2—Sharples #16-P cent., T304SS, pressuretite.
1—Bird 32" x 50" cylindrical contin. cent., T316SS.
1—TOLHURST 48" SUSP. CENT., T304SS.
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1—ALLIS-CHALMERS 7' x 120' ROT. KILN, ⅜" WELDED.
5—F. J. Stokes #138J-16 vac. shelf dryers, 195 sq. ft., 16 shelves, 40" x 44".
5—BUFLOVAK 42" X 120" DRUM DRYERS, ASME 160#.
1—American 42" x 120" dbl. Drum dryer, ASME, stainless.
1—Buflovak 42" x 90" dbl. drum dryer.
1—AMERICAN 36" X 84" DBL. DRUM DRYER, ASME, VACUUM.
1—BUFLOVAK 5' X 12' SINGLE DRUM DRYER, VACUUM.
1—Buflovak 32" x 52" dbl. drum dryer, ASME 100# WP.
1—Buflovak 6" x 8" dbl. drum dryer, vacuum.
2—Buflovak Vacuum shelf dryers: 110, 98 sq. ft.
2—DAVENPORT 8' X 60' ROTARY DRYERS, 7/16" WELDED.
1—Louisville 4'6" x 25' rot. steam-tube dryer, welded.
1—Hardinge 4' x 30' rot. steam-tube dryer.
1—Bartlett 3' x 15' rotary dryer, everdur shell.
1—BOWEN STAINLESS LAB. SPRAY DRYER.

MIXERS

1—BAKER PERKINS #15, 100 GAL. DISP. BLADES, JKT., T347SS.
50—BAKER-PERKINS #17, 200 GAL. SIGMA JKTD. MIXERS.
1—Baker-Perkins #16, 150 gal. sigma jktd. mixer.
1—BAKER-PERKINS #15-UUMM, 100 GAL. DISPERSION MIXER, 100 HP, ASME JACKET, CORED BLADES, COMPRESSION COVER, MOTORIZED TILT.
1—J. H. Day #6 Cinc., 100 gal., sigma blades, Stainless.
2—Baker-Perkins #15, 100 gal., sigma jktd. mixer.
2—J. H. Day #5 Cinc., 75 gal., sigma blades.
1—J. H. Day #2 Cinc., 20 gal, jktd., sigma blades.
1—GEMCO 60 CU. FT. T304SS CONICAL BLENDER.

STAINLESS STEEL TANKS

1—5700 gal. horiz., T304 SS, 6'4" x 24', UNUSED.
1—4300 GAL. HORIZ. T304 SS, 6' x 20', DISHED HEADS, 50# WP.
1—3300 gal. vert., T304 SS, 6' x 14', dished heads.
1—3000 gal. vert., T304 SS, 6' x 15', coils, Vac.
3—2750 GAL. VERT., T316 SS, 7' x 8', DISHED HEADS, COILS.
2—2300 gal. vert., T316 SS, 7' x 8', coils, agit.
4—2250 GAL. VERT., T316 SS, 7' x 6'3", DISHED HEADS.
1—2100 gal. vert., T316 SS, 6' x 9'10", cone bottom.
12—1750 gal. vert., T304 SS hoppers, 235 cu. ft.
1—1600 gal horiz., T304 SS, 5' x 11', dished heads.
6—685 gal. vert., T316 SS, 3' x 13', coils.

WEEKLY FEATURE!

6—465 GAL. T304L STAINLESS JACKETED KETTLES, 150# INTERNAL WP, 165# JKT. WP. PRICED TO SELL!

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OUTSTANDING MACHINERY-RIGHT NOW! WHEN YOU NEED IT!!

1—Pfaudler 30 gallon glass lined, jacketed and agitated reactor with condenser.
1—F. J. Stokes model 138-B vacuum shelf dryer, stainless steel shelf.
5—Stainless steel jacketed and agitated reactors 50, 100, 125, 400, 1000 gallons.
1—30" x 30" rubber lined filter press, hydraulic closing.
1—40" rubber lined suspended centrifuge.
1—Williams (Zenith) 3 roller mill.
1—Readco heavy duty 50 gallon sigma bladed double arm mixer.
1—33 cu. ft. stainless steel double spiral ribbon blender.
4—F. J. Stokes tablet presses models R, T, RD-3, RD-1.
3—Mikro pulverizers models 3-TH, 2-TH, 1-SH.
2—Labour stainless steel centrifugal pumps size 35-W type DL, 15 HP.

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"OUTSTANDING VALUES"

PILOT PLANT REACTORS
1—Pfaudler 30 gallon Model P glass lined jacketed, agitated. Complete. Perfect condition.
2—50 gallon Stainless Steel, jacketed, agitated. Internal pressure.
IMMEDIATE DELIVERY FROM STOCK
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ECH SPECIALS

Readco SS J'ktd. 6 qt. Lab Mixer, vac. cover
Blaw Knox SS 100 gal. Autocl. Agtd. 1000 PSI
Oliver 316 SS Filter 6' dia., 25 sq. ft. cap.
Patterson SS 5 cu. ft. Twin Blender, 3 HP
Cavagnaro sig. arm 200 gal. SS mixer, 75 hp
Pfaudler 1500 gal. Glass Tank, closed top
2—SS Fitz Mills, model D, w/5 HP motor
Simpson 18" Lab. Mix Muller with ¾ mtr.
Howes Ribbon Blenders, SS & Steel, NEW & USED
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Pfaudler 500 gal. Type ELL Glass Lined, jktd., agit. Reactor.
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Nash #9, #4, K5 and TS10 Hytor Vacuum Pumps.
Squire 500 sq. ft. tray truck Dryer.
2500 gal. Pfaudler Glass Lined Horiz. closed Tank.

STAINLESS COLUMNS
12"x20'—Packed
36"x21'—Packed
36"x17'—15 cap trays
48"x40'—40 cap trays
54"x30'—26 cap trays
72"x30'—21 cap trays
78"x18'—14 cap trays

COPPER COLUMNS
24" x 8'—15 cap trays
24"x17'—24 cap trays
30"x11'—12 cap trays
36"x12'—15 cap trays
48"x16'—21 cap trays
48"x25'—35 cap trays
72"x16'—16 cap trays

STAINLESS TANKS
11000 gal. Horiz. 8'x29'6"
4500 gal. Vert. w/coils
4000 gal. Vert. w/coils
4000 gal. Vert. 7'6"x12'
3500 gal. Vert. w/coils
3500 gal. Vert. 8'x9'
1500 gal. Horiz. 6'x6'9"
1200 gal. 5'x8' Agit
900 gal. 5'x6'
750 gal. 5'x5' Agit
500 gal. 3'6"x8' Agit
500 gal. Vert. w/coils
400 gal. 4'x4' Agit
300 gal. 4'x3' Cone bot
150 gal. 3'x3' Agit

ALUMINUM TANKS
12000 gal. Horiz. 10'x23'
10000 gal. Horiz. 9'x23'
7000 gal. Vert. 10'x12'

COPPER TANKS
3500 gal. 8'x9' w/coils
2000 gal. 7'x7' w/coils
500 gal. 4'x5' w/coils

STEEL TANKS
22000 gal. Vert. 12'x25'
11000 gal. Horiz. 8'x30'
8500 gal. Vert. 8'x22'
5000 to 250 gal. (50)

MISCELLANEOUS
S.S. Condensers 1000 to 68 sq. ft.
S.S. Centrif Pumps 2", 1½", 1".
Norwalk Compressor 15000 PSI.
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EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—Buflovak lab. pilot plant chrome plated double drum dryer, 6" x 8" with variable speed drive.

1—Hersey 3' x 20' SS rotary dryer, complete.

2—Louisville SS 8' x 50' rotary dryers, complete.

1—Allis Chalmers SS 6' x 50' rotary dryer.

2—Bonnot rotary kilns, 8' x 115' complete.

1—Bonnot rotary cooler, 8' x 50'.

1—American 42" x 120" double drum dryer.

1—Stokes single door vacuum shelf dryer with 6 shelves.

5—Tolhurst 40" and 30" center slung rubber covered centrifuges.

1—Raymond #5057 high side five roll mill.

1—Raymond 2 roll high side mill.

1—Sharples type 316 SS Super-D-Canter, PN-14, complete.

1—Williams "Comet" 4011 mill, complete.

2—Mikro #3TH SS pulverizers, complete.

1—Struthers Wells 2000 gal. SS jacketed reactor.

1—Whitlock 500 gal. SS jacketed reactor.

1—Pfaudler 750 gal. glass lined reactor.

3—Pfaudler glass lined thimble type condensers, 14 and 9 sq. ft.

1—Pfaudler 300 gal. glass lined jacketed reactor.

1—Theo. Walters 300 gal. Hastelloy B jacketed reactor.

2—Nickel 200 gal. jacketed reactors.

1—Blaw-Knox 300 gal. SS vacuum receiver with coils.

1—Baker Perkins SS double arm sigma blade mixer, 9 gal.

1—Sharples type 316 SS centrifuge, D-2.

15—Robinson SS double ribbon blenders, 255 cu. ft.

1—Robinson SS double ribbon blender, 125 cu. ft.

1—Baker Perkins SS double arm sigma blade mixer, 9 gal.

20—Davis Engineering type 316 SS heat exchangers, 100 to 175 sq. ft., NEW.

3—Davis Engineering Carpenter 20 heat exchangers, 120 sq. ft., NEW.

16—Kinney vacuum pumps, 750 CFM, 1 Micron, 15 HP motors.

1—Niagara Filter, SS, Model 510-28.

12—Sweetland #12 filters with 72 SS leaves.

1—Steel ball mill 7½' x 7', complete with full charge of steel balls and drive.

1—Sprout Waldron pelletizer, Type 501 FF.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

2—OLIVER PRESS PRECOAT FILTERS 5'3"—Type 316 S.S.

4—RIBBON BLENDERS, 2500 gal., 1200 gal.

2—AUTOCLAVES S.S., 50 gal. 2000 lb., 3½ gal., 2000 lb.

1—DRUM DRYER, Proctor & Schwartz.

4—COLLOID MILLS, 5 HP EX PR., 15 HP, 40 HP.

Machinecraft Corporation
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FOR THE BEST IN USED EQUIPMENT
SPECIAL BUYS

Conical Dry Mixer 192 cu. ft. vol., 125 cu. ft. apr. vol., with 15 H.P. Unibrake Motor.
2—Ball & Jewell #2 Cutters.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor, 2—drums balls. Like new.
1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed.
2—Aetna Water Stills 20 gph, new.
Scotch Boiler, 100 H.P., 125 lbs. w.p.—Insulated and Gas Fired, with Return System. Used 5 days at Show.

We have many other items that we cannot list, such as—Filters, Pumps, Tanks, Stainless Steel Kettles, Mixers—all in excellent condition and ready for prompt shipment.
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HERSEY 5' x 26'
ROTARY STAINLESS DRYER
DAY HY-R SPEED MILL
NEW 4000 Gal. STAINLESS TANK

CENTRIFUGALS—12" 30" 40" & 48". Amer. Tool 18" Stainless.
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5' x 26' Rotary Stainless
Buffalo 32" x 98" Double Drum Dryer
Buffalo Vac. Drum Dryer 24" x 26".
Despatch Ovens Elec. Heated.
3—Devine & Stokes Vac. Shelf Dryers.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—#2 Sweetland 12 Stainless covered leaves.
Hercules Filter 36".
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Steel Alum & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
Mikro Pulverizer #4, 2S1, 2TH, 1SH.
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #3 & #2XX Hammer Mills.
Taylor-Stiles 7½ HP Cutter.
Rotary Cutters 1 HP & up.
Sprt-Wald Stainless Spike Crusher.
Pebble, Jar & Ball Mills, Lab to 6' x 8' 3 Roll, 9" x 24", 12" x 36", 16" x 40".
Lehmann 4 Roll W. C. 12" x 36" Steel.
MIXERS—Baker Perkins 100 gal. Jack. S. P. 15 HP—Masticator Mixer.
Day Imperial 75 & 150 gal.
Change Can Mixers 8, 15, 40, 80 gal.
Day Jumbo 700 gal. horiz. Mixer.
Sprout-Waldron 10,000# horiz. Spiral Mixer
Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 10,000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc
TABLET MACHINES—Colton 4½ T.
Stokes R single punch & RDI rotary.
TANKS—Stainless, GL., Lined, Steel.
MISC. Boilers Gas & Oil, Conveyors.

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BIRD Continuous Centrifuges 18" x 28" 316 S.S. (1952) 15 H.P. Washing

OLIVER VACUUM FILTER—S.S. 316, 3'x6'
COLUMN S.S. 4' D x 65' high, 55 plates.
TANKS S.S. 304, 2500 gal. 7' x 8' new.
KNEADER MASTER—Paterson 2½ gal.
CENTRIFUGE—Tolhurst 20" rubber lined.
COLLOID MILL—Premier UB5 S.S. 5 H.P.
LOUISVILLE ROTARY DRYER 1' x 8'—S.S.
CENTRIFUGE—ATM Susp. 48" 316 S.S.
ROLLER MILLS—Ross 14" x 32" Hi Speed Ross 4½" x 10".

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N.J. Tel. FUlton 1-1103-4

CHOICE EQUIPMENT

2—Sparkler 14" & 8" Stainless Steel Filters.
5—Hercules 16" & 8" Square Stainless Steel Filters.
1—Model 1H Homo Mixer 1 H.P. XP Motor.
1—Charlotte ND20—S.S. Colloid Mill—XP Motor.
2—Werthite S.S. Pumps—8" x 6"; 3" x 2"
1—Stainless Steel 30 gal. Autoclave 1000 psi w/Jacket & Agitator w/XP Motor.
1—Cyclotherm Package Boiler 250 psi, 600# hr.—20 HP.
4—Stainless Vacuum Receivers 50 to 100 Gals. 250 psi.
1—Horiz. Closed Spiral Mixer, 3' x 12', Jack.
3—Spiral Blenders, 800 to 2000#.
1—Day Stainless Steel Blender 2000#.
1—Patterson 5' x 6' Jack. Ball Mill, 25 HP.
1—Day 50 Gal. S.S. Sigma Blade Mixer.
1—N. J. MX Pony Labeler.
1—Resina Automatic Screw Capper, Model Spec. 60 pm.
5—Rotex Screens 20" x 38" to 60" x 84".
1—Kent High Speed 3 Roll Mill 13" x 32".
1—Devine Vac. Shelf Dryer, 10 shelves, 40" x 43".
1—Kent 20 Gal. Super Pony Mixer.
1—Mikro #3TH Pulverizer 15 HP.
1—Pfaudler 800 Gal. G.L. Jack. Tank w/Ag.

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We Buy Your Surplus.

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LABELLING MACHINE—Quart to gallon, round cans, Std. Knapp.

TANK—Heresite lined 5'x5' cone botton —5'x7' ASME 125 PSI, cone bottom.

TABLET PRESSES—Stokes "R" w/3 HP varidrive.

PUMPS—Stainless, Centrifugal 2" & 3" w/xproof motors.

DRYERS — Vacuum Shelf — 356 sq. ft., 13 shelves, 59x78, 2 doors.

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ROOTS CONNERSVILLE BLOWER
Size 22" x 54" type RCDH. 11,900 CFM at 28 ounce, discharge pressure at 344 RPM. in perfect condition.

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Our Price ..... $ 4,250.00

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Are you interested in European common market? Old established West German chemical and pigment producer owns large industrial tract on Rhine looking for American manufacturer with funds to match theirs in joint venture. OPD 206.

EQUIPMENT OFFERED

For Sale: 1,500 gallon Glascote glass lined Reactor Kettle, 90 P.S.I. working pressure in jacket, 50 P.S.I. working pressure in shell, Vertical agitator and baffle. Excellent; Also 40" and 26" Tolhurst suspended perforated Centrifuges; 42" x 120" and 49" x 90" Double Drum Dryers. Four 3001 sq. ft. steel Heat Exchangers 250 P.S.I. Best Equipment Co., 1737 W. Howard St., Chicago 26, Illinois.

Used Bird Centrifugals. Good Condition. Rubber Covered 40" Baskets, Complete with Motors. H. Ohl, S. B. Penick and Company. Lyndhurst, N. J.

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For Sale—Approximately one ton Lithium Sulfate Anhydrous Powdered. Bids welcomed. OPD 211.

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Sell Your contaminated chlorinated solvents. We pay highest prices for residue solvents from cleaning tanks, degreasers or other processes. Get our offer! Chemical Producers Service, Tenafly, N. J. LOwell 8-0511.

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Salesman—Chemicals Old established firm has opening for ambitious young man—excellent opportunity to learn. Write giving details and salary desired. OPD 213.

SERVICES OFFERED

High Vacuum molecular distillation for large quantity runs on a toll basis. Separations without thermal hazard. Molecular Distillations, Inc., 527 Madison Avenue, New York 22, Tele: PLaza 3-6527

ALUMINUM CONDENSER, 350 sq. ft.
4—24" FILTER PRESSES, S.S. fittings, wood frames.
LAPP FITTINGS, VALVES.
Continuous Stripping COLUMN 2x13.
ALUMINUM EVAPORATOR, Calandria type, 1300 sq. ft.
BLENDER—Double Cone, 70 cu. ft.
Ribbon Blenders, Hydraulic Pumps.

MACHINECRAFT CORP.
600 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

Food Additives Extension

—Continued from page 3

the bill becomes law, Mr. Larrick will announce that all current extensions will be continued in force for a reasonable time (about two months) during which time those who believe that they have a basis for further extension can submit appropriate requests in line with requirements that will be specified in the *Federal Register*.

Immediately following passage of HR 3980, the house is expected to take up a similar extension bill, HR 4662, dealing with the nematocides, plant regulators, defoliants and desiccants, which congress last year transferred from the food additives law to jurisdiction of the Department of Agriculture under the Miller pesticide law.

In reporting the bill to the house last week, the agricultural committee broadened its provisions slightly to permit further extensions of time when these chemicals must comply with the Miller law regardless of whether previous extensions had been granted.

Kefauver in the Springtime: Probe Set

—Continued from page 5

Federal Trade Commission went up to the senate from the White House last week, and Mr. Rand has said he intends to take over his new post as soon as he is confirmed.

Successor to Mr. Dixon as chief counsel for the committee has not been announced by Sen. Kefauver, but the speculation is that the job will be passed on to Mr. Rand's principal assistant, Horace L. Flurry. Mr. Kefauver is expected to announce the appointment before the hearings get under way.

Mr. Dixon's nomination to the FTC will go before the senate commerce committee for review and possible hearings, if any are requested. His approval by the senate is expected.

FDA has made a number of seizures of counterfeit drugs in the past several years—some of them deficient in potency and a real hazard to patients. In the past year, however, there have been no seizures of this type.

Counterfeit Means 'Palmed Off'

The agency regards counterfeit drugs as being those of unknown manufacture which are palmed off as the real thing. There are a great number of drugs properly labeled and similar to others, and sometimes substituted in the filling of prescriptions, but these are not considered in the same class as counterfeit drugs.

Also, there are a number of small dealers in and around large metropolitan centers who make a business of gathering in odd lots of prescription drugs, either from distressed sales, or physician samples which are repackaged and sold to retailers. These, too, are considered outside the area of counterfeit drugs.

Whether the Kefauver committee hearings will get into these areas remains to be seen. Mr. Kefauver has not given his definition of counterfeit drugs nor announced the scope of his inquiry.

Still on the committee's agenda, after the counterfeit drug hearings are concluded, is the proposed investigation into financial tie-ups of drug companies with investment houses, and the general hearings on drug legislaiton, at which representatives of the American Medical Association and the industry are expected to testify. No date for these investigations has yet been fixed.

Fertilizer for India

—Continued from page 4

plete feasibility studies on the proposed operation will be undertaken.

Private Indian stockholders will be invited to participate in the venture. The three basic partners will provide technical know-how and manage the undertaking.

Completion of the Visag project, expected in 1963, will coincide with the third year of India's current five-year plan, in which principal emphasis is on food production. To feed a population which is expected to exceed 450 million by 1966, India has taken urgent action to improve its food production capacity.

"It is generally agreed that fertilizer is the key in such a program," says a report from International Minerals.

Current Market Quotations

—Continued from page 37

Ylang Ylang oil, Bourbon, extra	bots	lb.	24.00 -33.00
Yohimbine hydrochloride, bots., tins.		oz.	3.75 4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works	lb.	.37	- —
50-lb. bgs., smaller lots, f.o.b. works	lb.	.41	- .44
Zinc acetate, NF, VIII, dms	lb.	.53	—
Tech., dms., l.t.l., works	lb.	.2950-	—
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.25	- —
bgs., less than 1,000 lbs., same basis	lb.	.27	- —
Zinc chloride, NF, gran., dms	lb.	.42	- —
NF, precip., powd., dms	lb.	.26	- —
Tech., soln., 50%, dms., c.l., works 100 lbs.		5.80	- —
dms., l.c.l., works 100 lbs.		6.40	- —
tanks, works 100 lbs.		5.15	- —
fused, dms, c.l., works 100 lbs.		10.70	- —
dms., l.c.l., works 100 lbs.		11.20	- —
gran., fib dms, c.l., works, 100 lbs.		11.45	- —
fib dms, l.c.l., works 100 lbs.		11.95	- —
Zinc chromate bbls., dlvd.	lb.	.29	- —
Basic bbls., dlvd.	lb.	.34	- —
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust coml. bbls., c.l., works	lb.	.16	- —
Pigment, bbls., c.l., works	lb.	.15½-	—
bbls., l.c.l., works	lb.	.17¼-	—
Zinc fluoride, bbls., works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½-	—
dms., l.c.l., frt. alld.	lb.	.23½-	—
Zinc metal, prime western, slabs, E. St. Louis	lb.	.12	Nom.
Prime western slabs, New York.	lb.	.12½	Nom.
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	- —
10% Zn., dms., frt. alld	lb.	.33	- —
Zinc nitrate, tech., flake, 100-lb. fib. dms., l.c.l.	lb.	.16½-	—
300-lb. fib. dms, c.l.	lb.	.14½-	—
300-lb. fib. dms., c.l.	lb.	.14	- —
Zinc oxide, pigment, American process, lead-free bgs., c.l., f.o.b. works	lb.	.12½-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.13	- —
bgs., l.c.l., smaller lots, same basis	lb.	.13½-	—
Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b. works	lb.	.14	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.14½-	—
50%, bgs., c.l., same basis	lb.	.15	- —
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis.	lb.	.14¼-	—
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b. works	lb.	.12½-	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.13	- —
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis	lb.	.13½-	—
red seal, bgs. c.l. same basis.	lb.	.14½-	—
Zinc oxide, French process, green seal, bgs., l.c.l., 10 tons or more, same basis lb.		.13	- —
bgs., l.c.l. smaller lots same basis	lb.	.13½-	—
Zinc oxide, white seal, bgs., c.l., same basis	lb.	.14¾-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15½-	—
bgs., l.c.l., smaller lots, same basis	lb.	.15¾-	—
Zinc oxide, USP dms., c.l., frt. alld.	lb.	.16	- —
dms., l.c.l., 10 tons or more, same basis	lb.	.16½-	—
dms., l.c.l., smaller lots, same basis	lb.	.17	- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	46
NF, powd. dms	lb.	.48	49
Zinc resinate, precip. 7.2-7.6% Zn., dms., frt. alld.	lb.	.45	- —
Zinc silicofluoride, dms., works	lb.	12½	14
Zinc stearate USP, ctns., c.l.	lb.	.41	- —
	lb.	.41	- —
ctns, l.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn bgs. c.l. dlvd.E.	100 lbs.	8.75	- —
bgs., l.c.l. dlvd. E	100 lbs.	9.75	- —
Zinc sulfate in bbls 40c. higher.			
Zinc sulfide pure bgs. c.l. dlvd	lb.	.2530-	—
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04	- —
Zinc, yellow (see Zinc chromate)			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls., c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld	lb.	.26	- —
Normal, 250-lb. dms., frt. alld	lb.	.55	- —
Zircon (G) gran. bgs. c.l. works.	lb.	.03½-	—
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅝-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04	—
bgs., smaller lots, works	lb.	.06½-	—
Zircon (G) milled, bgs. c.l. works.	lb.	.04½-	—
bgs., 5 tons to c.l., works	lb.	.04⅜-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝-	—
bgs., 500-1,999-lb. lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms. c.l., 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride powd. electronic grade, dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls. or bgs. works	lb.	1.50	—
Electric-fused lump, bgs. 500 to 1,999-lb lots, works	lb.	.48½-	—
bgs., smaller lots, works	lb.	.51	- —
milled, bgs., c.l., works	lb.	.62	- —
bgs., 5-ton lots, works	lb.	.62½-	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½-	—
bgs., 500 to 1,999-lb. lots, works	lb.	.64	- —
bgs. smaller lots, works	lb.	.66	- —
Glass polishing grade, 94-97% ZrO_2, bgs. works	lb.	.55	.63
Opacifier grade 85-90% ZrO_2, bgs.,	lb.	.27	- .50
Stabilized oxide 91% ZrO_2, milled, bgs	lb.	.62	.65
Zirconium oxychloride, cryst., ctns., 5-ton lots works	lb.	.37½-	—

1—Goslin Birmingham 5' x 8' Flaker or Drum Dryer.
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Trade Name Chemicals

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G-60," "G-61" and "G-62" as oil epoxides with good permanence characteristics.

Archer - Daniels - Midland Company, Minneapolis, Minn., prices "Admex" polymerics "515," "562," "760," "761" and "770" in a range of 38½c. to 57½c. a pound.

The company makes over 300 resins and chemically-modified oils as well as fatty acids and alcohols and fatty nitrogen chemicals.

In the plasticizer area, ADM came up with a breakthrough in March of last year when the company marketed "Admex 750" to meet revised specifications in the automotive industry. The product features good low-temperature flexibility and is recommended for use in non-fogging vinyl formulations.

Two companion products—"Admex 752" and "Admex 755"—have been in the test sampling stage for the past three months before going into commercial production.

Formulators Need Variety of Plasticizers

ADM notes that as vinyl plastic markets have become more diversified it has been necessary for the plasticizer producer to offer a wider range of products. Small differences in performance and viscosity variations have become increasingly important to vinyl formulators.

"Plastolein 9720," offered by Emery Industries, Inc., Cincinnati, Ohio, falls into the lower molecular weight class of polymeric plasticizers. Price range is from 36½ cents to 41½ cents a pound, as to quantity, on a delivered basis.

Low-temperature properties of this product are said to equal those of many commonly used general-purpose monomerics. Due to relatively low viscosity, "9720" can be handled and pumped readily, the company reports.

Emery has several other polymerics in the development stage. The company believes that markets for polymerics will continue to grow based on the ability of these materials to extend the life of vinyl plastics products and operate over a wider temperature range.

Rubber Corporation of America, Hicksville, N. Y., markets "RC" plasticizers, chiefly phthalates, adipates and sebacates. As a polymeric plasticizer, the company offers "RC Polymeric BGA," a polyglycol adipate. Price is 46 cents a pound in truckload and 47½ cents a pound in less-truckload quantities on a works basis.

The product is especially recommended for use in applications requiring low volatility and low migration. This would include typical polymeric uses such as electrical insulation, gaskets for appliances and for film and sheeting applications.

Eastman Chemical Products has been on the market with "NP-10," a polymeric plasticizer based on neopentyl glycol, for about three years. The stable configuration of the neopentyl group contributes outstanding stability to this compound, Eastman reports. The product is priced at 44 cents a pound in truckload lots and is recommended for use in vinyls for making refrigerator gaskets and door linings.

A comparatively new product, "Texanol," is not a polymeric, but the molecule is of such a size that it almost gets into the polymeric class. Eastman makes this one by reacting two mols of 2,2,4-trimethylpentanediol monoisobutyrate with one mol of adipic acid.

Trade Name Briefs

ADDITIVES: Food & Drug Administration last week ruled that monoglyceride citrate may be used in antioxidant formulations for fats and oils, the quantity not to exceed 200 parts per million of the combined weight of oil or fat and the additive.

FDA also cleared butylated hydroxytoluene (BHT) for use as an antioxidant in potato granules in amounts not exceeding ten parts per million of the finished product.

COATINGS: Service Products Division of S. C. Johnson & Son, Inc., has come out with "Perma-Cote 61," an aluminum coating to provide protection from damage by wet mortar up to thirty days. The new product also gives aluminum, other non-ferrous metals and stainless steel "full protection against acids, alkali and outdoor exposure," according to Edward J. Grant, general manager of the division.

Cancer Drug: A Hope

—Continued from page 7

thirty-one had previously failed to respond to other available methods of therapy.

- Not less than 75-percent reduction in tumor masses occurred in at least half of the thirty-four cases.
- To date, twenty-three patients placed on maintenance doses of "Velban" have kept their improvement without relapse.
- Many patients benefited by the drug continue to be maintained in their improvement for periods ranging from several months to more than a year.
- Several patients have lost, at least for the present, all evidence of Hodgkin's disease.

In cases of choriocarcinoma, a form of cancer classified as very rare, Lilly reports that "Velban" has produced antitumor effects in seven of ten patients.

Soapers vs. Justice Dep't

—Continued from page 4

by the defendants to require the Justice department to produce the transcript of a grand jury investigation which led to the filing of the complaint. That matter was not settled until last October.

Following dismissal of the charges, the soap association issued a statement saying the action "represents complete exoneration of the industry from the charges made against its association and against certain of its members."

OPD Reports From Europe

Tetracycline Prices Tumble in Britain

—Continued from page 7

prescriptions for National Health Service patients—to 28 cents a prescription from the present 14 cents.

The balance of drug costs is met by the Ministry out of its income from insurance payments with appropriations from the general tax revenues of the government to meet its deficits.

The steady rise of the cost of the service and the drain on general tax revenues finally brought the increase for prescription purchases as well as rises in National Insurance premiums.

Profits Irk Labor Party

The profits of American companies, apparently large when related to the amount of invested capital, have been a particularly sore point with the Labor Party.

For instance, Cyanamid's balance sheet statements to the Board of Trade for its fiscal year 1959 (the last available) shows capital assets, before depreciation, of roughly $3 million, with trading profits of $11.8 million, net profit of $6.2 million and dividend payments to the parent firm of $5.1 million.

The Cyanamid figures for fiscal 1955 are: assets $855,000, trading profit $3.6 million, net profit $1.8 million and no dividends.

Some of the American companies have been pouring all their profits and cash flow back into expansion of their businesses. Pfizer, Ltd.'s reports, for example, show no dividends paid to the parent company, though net profit has increased from $650,000 in 1955 to $3.2 million in 1959.

Pfizer has been one of the most rapidly expanding firms and its capital assets have risen in the same period from $3 million to $13.5 million. Pfizer, Ltd., is owned by Pfizer Corporation, a Chas. Pfizer holding company registered in Panama.

Fast-Growing Merck, Sharp & Dohme

Another fast-growing operation is Merck Sharpe & Dohme, subsidiary of Merck & Co., which reported assets of $250,000, for fiscal 1955 and trading profit of $1.3 million. Assets were $1.9 million at the end of fiscal 1959 and net profits were $3.8 million. Merck's report on profits for fiscal 1960 (one of the latest available) shows net up over 30 percent from fiscal 1959 to $4.9 million.

The chief reason for this high profit-to-investment ratio is obviously the fact that these American-owned British drug companies draw on their parent companies for research and product development. And American drug research has accounted for about two-thirds of all the new preparations introduced since the war.

Ironically for Parliament, some British companies complain that the level of profit allowed by the National Health Service does not permit them to maintain research establishments on a scale really competitive with the parents of the American-owned subsidiaries.

Sales, advertising and promotion technics of modern drug companies have drawn from British left-wing politicians Kefauver-like complaints and the presence of such commercial tactics in the UK is always laid to the American firms.

There is a possibility that the Ministry of Health together with the Association of British Pharmaceutical Industry may investigate how large a part of drug cost is attributable to sales and promotion expenses.

'Alfol' Plant Slated

—Continued from page 3

lube oil additives, textiles and emulsifiers industries.

Ethylene from DEA's refinery at Heide, near the CONDEA site, will serve as the raw material for the CONDEA alcohol plant, which is slated for completion in mid-1963.

Meanwhile, DEA has set up a small-scale plant to produce one drum daily of "Alfol" samples for market development purposes in the next two years.

It's expected that CONDEA will push its detergent-grade alcohol owing to the increasing water and sewage contamination problem prevalent in Common Market countries.

It's becoming increasingly obvious to sanitation engineers that alkyl benzene sulfonates contained in synthetic detergents must be somehow modified or substituted for in order to overcome sewage plant foam problems and ground water pollution.

"Alfol" fatty alcohols, with their high molecular weight corresponding to "soapy" high molecular weight fatty acids, are more easily removed from waste waters.

FDA on FD&C Colors

—Continued from page 3

tain oil-soluble FD&C reds used in lipsticks would also provide sufficient pharmacological information to permit their use as color additives in oral drugs. Tolerances, if any, would depend on the outcome of animal tests being financed by the cosmetic industry. The PMA representatives concluded that the industry might well consider financing the necessary animal tests on D&C reds numbers 30 and 33, D&C greens numbers 5 and 6, D&C yellows numbers 10 and 11, and perhaps D&C blue number 6."

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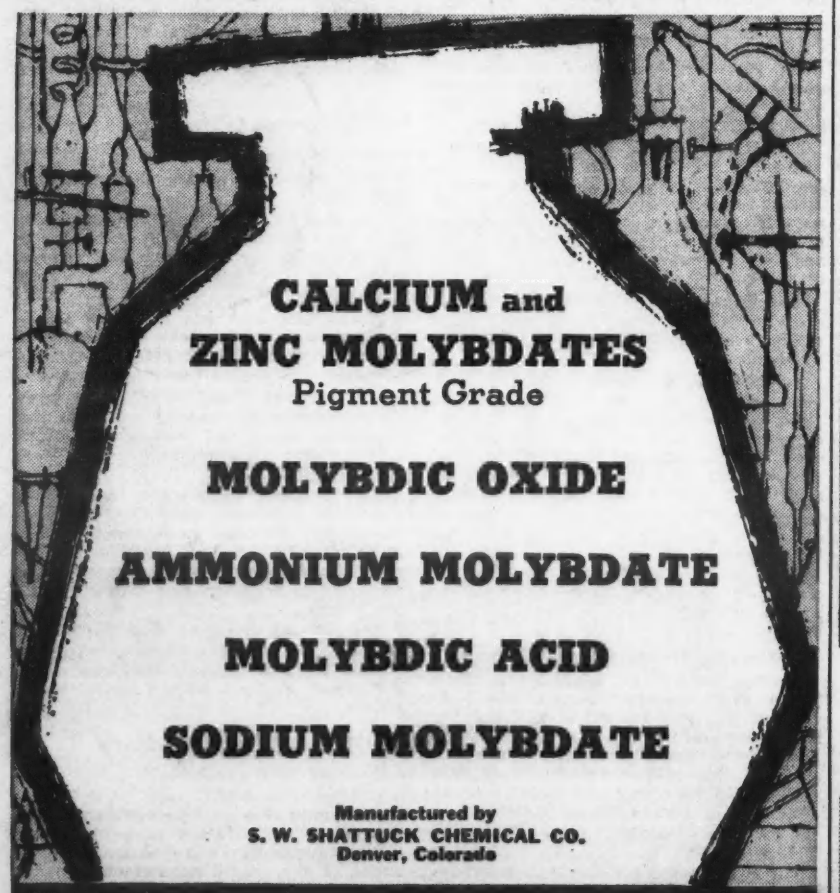

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